



Borough and Port of Lowestoft.

THE
ANNUAL REPORTS

OF THE
Medical Officer of Health,


THE
School Medical Officer,

AND
The Borough Meteorologist,

FOR
1909.

Lowestoft:

FLOOD & SON, LTD., THE BOROUGH PRESS.



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Sanitary Committee.

MR. ALDERMAN W. MOBBS, *Mayor*.

MR. ALDERMAN J. BECKETT, *Chairman*.

ALDERMAN :

A. STEBBINGS.

COUNCILLORS :

H. R. BOARDLEY

W. BERRY

B. S. BRADBEER

A. B. CAPPS

H. H. COPEMAN

F. T. DEWING

C. Y. FRY

G. FISK

J. JACKMAN

W. ROBBENS

J. SMITH

E. TUTTLE

R. C. TODD

J. T. WOOLNOUGH

ISOLATION HOSPITAL SUB-COMMITTEE :

MR. COUNCILLOR E. TUTTLE, *Chairman*.

COUNCILLORS :

W. BERRY

G. FISK

J. SMITH

JOINT SMALLPOX AND QUARANTINE HOSPITAL :

ALDERMAN J. BECKETT, *Chairman*.

Statistical Summary.

Area of the Borough	..	..	..	(acres)	2,574
Estimated Population	..	..	..	..	36,542
Rateable Value	..	..	..	..	£146,478
Birth Rate	..	..	..	..	26·9
Gross Death Rate	..	..	..	..	10·8
Rate of Infantile Mortality (per 1,000 births)	..	..			98
Zymotic Death Rate	..	..	..	..	0·87

To the Mayor, Aldermen and Councillors of the Borough of Lowestoft.

GENTLEMEN,

I have the honour to present to you the Annual Statistical Report for 1909.

The population as enumerated at the census taken on the night of 31st March, 1891, was 23,490. The enumeration at the census of 1901 gave a population of 29,850. The population estimated to the middle of 1909 is 36,542.

Special attention is called to :—

1. The progressive decrease of the Infantile Mortality.
2. The lowest Death Rate on record.
3. To Table VII. in the Appendix.
4. The letter from the Local Government Board sanctioning the enlargements at the Isolation Hospital.

I attended the opening of the Tuberculosis Exhibition by the Rt. Hon. John Burns, at Whitechapel, on 2nd June. I also attended the Congress of the British Medical Association, at Belfast, in July.

I am again indebted to Mr. Edwards, the Borough Meteorologist, for his valuable assistance in the compilation of this Report.

On the Marriage and Birth Rates.

Two hundred and ninety *marriages* have been registered as having occurred within the borough. This is equivalent to a gross *marriage rate* of 15·8 *per 1000 per annum*. In the previous year the number of marriages was 312, and the year before that 322.

The total number of *births* registered was 985 which is equivalent to a *birth rate* of 26·9 *per 1000 per annum*, as against 29·0 for 1908.

The accompanying table shows the quarterly distribution of births as to rate, sex and legitimacy :—

Period.	Legitimate.		Illegitimate.		Total. Births.	Rate per 1,000.
	Male.	Female.	Male.	Female.		
1st Quarter ..	120	120	6	5	251	27·4
2nd „ ..	106	116	7	1	230	25·1
3rd „ ..	120	121	2	5	248	27·1
4th „ ..	141	110	4	1	256	28·0
	—	—	—	—	—	—
Totals	487	467	19	12	985	26·9

Over 3 per cent. of the births were illegitimate.

General Mortality Statistics.

Three hundred and ninety-six deaths were registered as having occurred within the borough. The *gross annual rate of mortality per thousand of the estimated population* is 10·8. By excluding four deaths which occurred among “non-residents,” *i.e.*, among “persons brought into the district on account of sickness or infirmity, and dying in public institutions”; and again by including 32 deaths in Oulton Workhouse, we obtain a corrected total of 425 and a *corrected death rate of 11·6 per 1000 per annum.*

Of 132 deaths which occurred under the age of five years, 5 were due to Zymotic Enteritis and 7 to Whooping Cough: 97 of these 132 deaths were in infants under 1 year, the rate of *Infantile Mortality* being 98 per 1000 births. The rate for 1908 was 112. In 1907 it was 121, and in 1906 it was 128.

In the following table, deaths are apportioned according to the locality in which they occurred.

		Population.	Deaths.	Death Rate.
North Ward	..	10407	138	13·1
South	„ ..	9147	113	12·3
East	„ ..	6648	77	11·6
West	„ ..	10340	97	9·4
		—	—	—
Totals	..	36542	425	11·6

Special attention is called to Table VII. in the Appendix, which shows that the death rate is lower than that for England and Wales by 2·9, the 76 great towns by 4·0, the 143 smaller towns by 2·9, and England and Wales, less the 219 towns, by 2·0, the crude rate being 10·8, and the corrected 11·6 per 1000 population. It is also lower than it has ever been since the passing of the Public Health Act of 1875.

Morbidity.

During the year 192 cases of notifiable diseases came under observation, as compared with 316, for the same diseases, last year.

Their locality and age distribution are shown in the Appendix, Table III., and in Table VI. will be found an analysis of infectious cases reported since the adoption of the Notification Act.

I prefix my remarks on the various infectious diseases by the following Table of the number of notifications received and deaths registered :—

					Cases notified in 1909.	Deaths registered in 1909.
Small-pox .. .. .	..	..	..	..	—	—
Scarlet Fever .. .. .	..	..	..	..	116	2
Diphtheria .. .. .	..	..	..	..	38	4
Membranous Croup .. .. .	..	..	..	..	—	—
Typhus Fever .. .. .	..	..	..	..	—	—
Enteric or Typhoid Fever .. .. .	..	..	..	..	6	2
Continued Fever .. .. .	..	..	..	..	—	—
Relapsing Fever .. .. .	..	..	..	..	—	—
Puerperal Fever .. .. .	..	..	..	..	1	—
Cholera .. .. .	..	..	..	..	—	—
Erysipelas .. .. .	..	..	..	..	31	—
Plague .. .. .	..	..	..	..	—	—

SMALL POX.

No cases of this disease occurred in the Borough during the year.

ENTERIC (TYPHOID) FEVER.

Six cases only of this disease were notified during the year, resulting in two deaths. Of these six cases one was unquestionably imported, in another there was a history of having eaten mussels some time previously, and in a third the diagnosis was revised to Tertiary Syphilis.

	First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.	Total.
North Ward ..	—	—	1	—	1
South „ ..	—	—	1	—	1
East „ ..	—	1	—	—	1
West „ ..	—	1	2	—	3
Totals ..	—	2	4	—	6

Five cases were admitted to the Isolation Hospital.

The following letters explain themselves :

BOROUGH OF LOWESTOFT.
URBAN AND PORT SANITARY AUTHORITY.

TOWN HALL,
LOWESTOFT,

12th January, 1909.

DEAR DR. BULSTRODE,

I am sending you, under separate cover, to-night Ordnance Map as requested, showing the position of every pipe discharging, regularly or intermittently, sewage into Lake Lothing, from which you will see that the amount going in from sewers and other pipes is, comparatively speaking, small. This map has been prepared by the Borough Surveyor under my direction.

I enclose copy of a letter and enclosure sent this day to Mr. Litheby.

Yours truly,
AUGUSTINE MARSHALL.

BOROUGH OF LOWESTOFT.
URBAN AND PORT SANITARY AUTHORITY.

TOWN HALL,
LOWESTOFT,

12th January, 1909.

J. LITHEBY, ESQ.,

Assistant Secretary Local Government Board, Whitehall, S.W.

SIR,

I have been instructed by my Council to forward you the enclosed newspaper, containing a report showing that the embargo from the contaminated Wells Mussels has been removed, and to ask you if the Board anticipate taking any steps to prevent the sale of these Mussels.

I am, Sir,

Your obedient servant,

AUGUSTINE MARSHALL.

5628 M. 1909.

LOCAL GOVERNMENT BOARD,
WHITEHALL, S.W.

27th February, 1909.

SIR,

I am directed by the Local Government Board to advert to the Medical Officer of Health's letter of the 12th ultimo, enquiring whether they propose taking any steps to prevent the sale of mussels from Wells, and, in reply, I am to inform you that their Inspector, Dr. Bulstrode, has been instructed to report on the question of the mussel layings at Wells, and that on receipt of his report the Board will give the matter their careful consideration.

I am, Sir,

Your obedient servant,

(Signed) JOHN LITHEBY,

Assistant Secretary.

THE TOWN CLERK,

LOWESTOFT.

DIPHTHERIA.

Thirty-eight cases were notified, as against 32 for last year; 25 of these were removed to the Isolation Hospital. Four deaths were registered, two in their own homes, and two in the Isolation Hospital.

From the accompanying Table it will be seen where the disease prevailed.

	First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.	Total.
North Ward	1	2	3	3	9
South „	4	1	3	9	17
East „	1	2	3	1	7
West „	1	—	—	4	5
	—	—	—	—	—
Totals	7	5	9	17	38

The number for the last 20 years will be seen on reference to the Appendix, Table VI.

SCARLET FEVER.

The following table expresses in a short space the localities from which this disease was reported, and also the time of the year in which it occurred, the largest number of cases being reported from

the West Ward, followed by the South, North and East respectively. There was a total of 116 cases as compared with 176 for last year, the largest number occurring in the fourth quarter.

	First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.	Total.
North Ward	—	6	4	10	20
South ,,	16	—	8	11	35
East ,,	4	8	—	3	15
West ,,	11	13	6	16	46
	—	—	—	—	—
Totals	31	27	18	40	116

Reference to Table III. in the appendix shows the number in age groups and localities. A study of this Table is interesting, as it shows that the largest number, 68 or more than half occurred in age group 5 to 15, or school age; the next largest number 28, occurred in age group 1 to 5.

Again, reference to Table III. in the Appendix will show that there were treated in the Isolation Hospital, 16 from the North, 22 from the South, 13 from the East, and 39 from the West Wards; a total of 90.

WHOOPING COUGH.

This disease accounted for 7 deaths, 4 being under one year of age and 3 in the age group of 1-5 years. Nine occurred in first quarter, one in second quarter, none in third quarter, and six in fourth quarter. The total number of deaths was 7 less than last year.

A joint report issued by the Chief Medical Officers to the Local Government Board and the Board of Education, relating to the principal Zymotic Diseases, will be found incorporated with this report.

TUBERCULOSIS.

At the February meeting of the Council I reported that the Local Government Board had directed the notification of all cases of Tuberculosis in poor persons, and I am now keeping a register of all such cases.

Reference to Table VI. will show that 15 cases have been notified.

At the April meeting of the Council I submitted a memorandum of the Chief Medical Officer to the Local Government Board, and issued by the Board, on administrative measures against Tuberculosis, but the Committee resolved to take no action on the memorandum at present.

Circular.

*Councils of Metropolitan and other Boroughs,
and of Urban and Rural Districts.*

PUBLIC HEALTH (TUBERCULOSIS) REGULATIONS, 1908.

LOCAL GOVERNMENT BOARD,

WHITEHALL, S.W.,

4th March, 1909.

SIR,

I am directed by the Local Government Board to advert to the Public Health (Tuberculosis) Regulations, 1908, and to their circular letter of the 18th December, 1908, in which they stated that they proposed to issue a memorandum by their Medical Officers setting out the appropriate action that can be taken under the powers conferred on Sanitary Authorities by the Regulations. Copies of this Memorandum are now enclosed.

The Regulations apply only to patients who come under the care of poor law medical officers, but in view of the fact that in many districts there is a voluntary notification of cases of pulmonary tuberculosis by medical practitioners generally, the Memorandum has been extended so as to deal with preventive measures in respect of cases notified under a voluntary system.

The Board request that one copy of the Memorandum may be given to the Medical Officer of Health, and they trust that the Council, in consultation with him, will take such action as may be practicable of the kind indicated in the Regulations and Memorandum.

They are desirous that in each Annual Report the Medical Officer of Health should include a statement of the action taken by the Local Authority under the Regulations.

The Memorandum will be placed on sale so that copies may shortly be obtained, either directly or through any bookseller, from Messrs. Wyman and Sons, Limited, Fetter Lane, London, E.C.

I am, Sir,

Your obedient Servant,

S. B. PROVIS,
Secretary.

The Town Clerk *or*
The Clerk to the Urban
or Rural District Council.

Circular.

*Medical Officers of Health
of certain Districts.*

NOTIFICATION OF CASES OF PULMONARY TUBERCULOSIS.

LOCAL GOVERNMENT BOARD,

WHITEHALL, S.W.,

7th May, 1909.

SIR,

I am directed by the Local Government Board to advert to the Public Health (Tuberculosis) Regulations, 1908, which provide for the notification to Medical Officers of Health of cases of pulmonary tuberculosis occurring among the inmates of Poor Law Institutions, or among persons under the care of District Medical Officers; and I am to state that the Board are desirous of obtaining information as to the number of cases of pulmonary tuberculosis notified from time to time under those Regulations.

The Board would be glad, therefore, if you would include in the weekly Return which you make to them of the number of cases of Infectious Disease notified to you in the District for which you act as Medical Officer of Health, a statement of the number of cases of pulmonary tuberculosis which are notified to you, setting out separately the cases notified during the week under the Regulations, and under any system of voluntary or compulsory notification that may be in operation in your district.

I am directed to add that it is not proposed to distribute weekly the information as to pulmonary tuberculosis thus received, but it may subsequently be tabulated and published in the Annual Report of the Board's Medical Officer.

I am, Sir,

Your obedient Servant,

S. B. PROVIS,

Secretary.

To the Medical Officer of Health.

The Borough Isolation Hospital.

One hundred and thirty-six cases were under treatment during the year: 120 cases were admitted, 112 were discharged, 4 died, and there were 20 remaining on 31st December.

The diseases treated were Scarlet Fever, Diphtheria and Typhoid Fever. The number of cases of each disease, with the result, is stated in the subjoined Table. The locality from which they came is shown in the Appendix, Table III.

		Scarlet Fever.	Diph- theria.	Typhoid Fever.	Totals.
Remaining 1st January	..	10	4	2	16
Admitted	.. ..	90	25	5	120
Discharged	.. ..	80	26	6	112
Died	.. ..	1	2	1	4
Remaining 31st December	..	19	1	—	20

The Institution continues to work harmoniously under an excellent Matron and staff.

BOROUGH OF LOWESTOFT.
URBAN AND PORT SANITARY AUTHORITY.

TOWN HALL,
LOWESTOFT,
16th April, 1909.

DEAR DR. SPENCER LOW,

Herewith please find daily list of cases treated at the Isolation Hospital during the year 1908.

It will be noticed that the highest totals were during April, notably the 15th, 48; and the 18th, 48.

These totals were exceeded in the year previous, when the number rose as high as 54.

I trust the information will be sufficient for your requirements.

Yours truly,

AUGUSTINE MARSHALL.

Number of Cases treated per day in the Isolation Hospital
during 1908.

	January.	February.	March.	April.	May.	June.	July.	August	September.	October.	November.	December.
1	16	18	26	32	31	24	19	19	19	19	12	20
2	17	18	28	36	31	24	20	15	20	16	15	22
3	17	18	28	37	29	24	21	16	21	16	15	22
4	17	20	28	38	29	25	22	15	20	16	15	22
5	13	20	25	38	28	24	21	17	22	16	16	27
6	13	21	25	38	26	24	22	17	21	15	17	26
7	13	21	26	43	26	24	22	18	21	15	17	25
8	14	19	26	43	26	24	22	17	21	15	17	25
9	15	19	27	43	24	24	23	16	21	13	17	26
10	15	19	26	44	26	24	22	18	23	13	17	22
11	15	19	26	44	29	24	22	19	23	12	18	22
12	15	21	25	44	29	24	23	19	22	13	18	23
13	15	22	26	47	26	23	23	19	22	11	18	22
14	14	20	26	47	24	20	22	20	22	11	18	22
15	14	20	24	48	23	21	20	20	22	12	18	22
16	15	20	26	46	25	23	20	19	23	11	19	22
17	15	23	26	46	24	26	20	21	24	11	20	22
18	16	23	26	48	28	21	21	21	24	11	20	20
19	16	23	28	46	28	21	21	19	24	12	20	21
20	16	22	31	47	24	18	21	18	22	12	20	21
21	16	23	32	46	23	16	21	19	24	12	20	21
22	15	23	30	41	23	17	21	19	23	12	20	21
23	15	23	31	42	23	18	20	19	24	13	20	22
24	15	24	33	38	24	18	20	19	24	13	20	22
25	15	24	34	37	24	18	21	17	22	12	20	22
26	15	24	32	32	24	19	22	18	22	12	19	22
27	17	24	31	32	24	20	22	18	22	11	19	23
28	18	25	32	32	26	19	20	18	22	10	21	23
29	18	26	31	32	24	19	19	18	19	12	19	19
30	16	—	34	32	25	19	19	18	18	12	19	18
31	16	—	37	—	24	—	19	18	—	14	—	18

VICTORIA HOTEL,

BRADFORD,

17th April, 1909.

DEAR DR. MARSHALL,

Many thanks for your letter and enclosure relating to the daily number of beds occupied in the hospital during 1908.

Believe me,

Yours very truly,

J. SPENCER LOW.

The alterations and additions to the Administrative Block and the provision of a new ward for an additional ten beds was sanctioned by the Local Government Board, after an enquiry held by Dr. J. Spencer Low, on the 31st March, as the following minutes of the Council will show :

At the April meeting of the Committee a letter was read, dated 27th April, from the Local Government Board, enclosing sanction to the borrowing by the Council of the sum of £3250 for extension of the Infectious Diseases Hospital, repayable in 29 years from the date of borrowing. The Board state that they are advised that it would be desirable to complete the 20-bed pavilion at the present time, and if this were done it could probably be built more cheaply than at a later date. The Board would be willing to consider an application for sanction to any further loan which may be necessary for the purpose.

The Sub-Committee refers the last Clauses of the letter to the Sanitary Committee for its consideration.

Resolved that the report of the Sub-Committee be adopted.

With reference to the letter of the Local Government Board, the Town Clerk was directed to inform the Board that the Council is of opinion that the enlargement now proposed is sufficient for the present needs of the Borough, and that the further accommodation will cost no more to provide at a later date if required.

The Surveyor was directed to prepare working drawings and quantities for the alterations and additions at the Sanatorium, and advertise for tenders and submit same to the next meeting.

At the June meeting of the Committee the Surveyor submitted fourteen tenders for the extension of the administrative block at the Sanatorium, and the provision of a new pavilion there, and the Committee recommended that the tender of Mr. A. G. Beckett, of Carlton and Lowestoft, at £1786 15s., being the lowest tender, be accepted, that a contract be entered into with him to carry out the work, and that the Common Seal of the Council be affixed to the contract and the necessary bond.

WATER SUPPLY.

The public water supply has been kept under observation, and in addition to the frequent analyses made on behalf of the Company, a copy of which is invariably furnished for the Committee's information by the General Manager, a sample is fairly frequently submitted to a London analyst. Copies of the last four bacteriological and chemical analyses are here reproduced.

THE ROYAL INSTITUTE OF PUBLIC HEALTH.

37 RUSSELL SQUARE,
LONDON, W.C.

22nd September, 1909.

Report from the Bacteriological Laboratories.

Examination of a Sample of Water.

Name of Sender: Dr. A. Marshall, Medical Officer of Health, Lowestoft.

Date received: 16th September, 1909.

Particulars on Label: From tap direct from main. Public water supply.

Physical Characteristics.

Colour in 2 ft. stratum :	}	See Chemical Report.
Suspended Matters :		
Odour when warmed to 37° C.		

Quantitative Enumeration of Bacteria.

On Gelatine Plates, kept for three days at 21° C. 257 colonies per 1 c.c. developed: of these 38, or 14·7 per cent., liquefied gelatine.

On Agar Plates, kept for two days at 37° C. 31 colonies per 1 c.c. developed.

Examination for Special Bacteria.

Bacteria Coli Communi, Streptococci, and B. Enteritidis Sporogenes were absent from 100 c.c.

Result of Examination.

The total number of colonies on gelatine is in excess of the usually accepted standard (100 per 1 c.c.), otherwise no exception can be taken to the use of this water for drinking purposes.

WILLIAM R. SMITH, M.D.,
Principal.

NOTE.—The above examination has been carried out in conformity with the procedure recommended by the Special Committee of Bacteriologists of The Royal Institute of Public Health on the "Standardization of Methods for the Bacteriological Examination of Water," August, 1904.

THE ROYAL INSTITUTE OF PUBLIC HEALTH.

37 RUSSELL SQUARE,
LONDON,

22nd September, 1909.

Report from the Chemical Laboratories.

Certificate of Analysis of a Sample of Water.

Name of Sender : Dr. Marshall, Medical Officer of Health, Lowestoft.

Date received : 16th September, 1909.

Particulars on Label : Public Water Supply.

Physical Characters :

Colour in 2 ft. stratum : Colourless.

Suspended matters : Absent.

Taste :

Odour when warmed to 37° C. : Normal. Neutral Reaction.

Chemical Characters :

	Parts per 100,000.	Grains per gallon.
Total Solids dried at 100° C.	29·20	20·44
Loss on ignition (after re-carbonating) ..	6·80	4·76
Chlorine	5·00	3·50
„ × 1·647 = Sodium Chloride ..	8·23	5·76
Nitrites (as N ₂ O ₃)	<i>Absent</i>	
Nitrogen as Nitrates	1·18	0·83
Saline Ammonia	0·007	0·005
Albumenoid Ammonia	0·017	0·012
Oxygen absorbed in 3 hours at 37° C. ..	0·098	0·068
Hardness—Total	15·70	11·00
„ Temporary	2·13	1·50
„ Permanent	13·57	9·50
Poisonous Metals—Lead	} <i>Absent</i>	
Copper		

REMARKS.

From the above data it will be seen that the figures for Albumenoid Ammonia and Nitrogen as Nitrates are in excess of the usual standards, and if comparison be made with previous analyses, it will be seen that there has been a tendency for these to gradually increase. Under these circumstances it would be desirable that the source of the water should be carefully examined.

WILLIAM R. SMITH, M.D.,
Principal.

THE ROYAL INSTITUTE OF PUBLIC HEALTH.

37 RUSSELL SQUARE,
LONDON,

30th November, 1909.

Report from the Chemical Laboratories.

Certificate of Analysis of a Sample of Water.

Name of Sender: Dr. A. Marshall, Medical Officer of Health,
Lowestoft.

Date received: 27th November, 1909.

Particulars on Label: Sample taken from tap at Town Hall, direct
from main.

Physical Characters:

Colour in 2 ft. stratum: Yellowish green.

Suspended matters: Absent.

Taste:

Odour when warmed to 37° C.: None. Neutral reaction.

Chemical Characters:

		Parts per 100,000.	Grains per gallon.
Total Solids dried at 100° C.	.. ..	30·6	21·42
Loss on ignition (after re-carbonating)	.. ..	13·3	9·31
Chlorine .. .. .	.. ..	4·8	3·4
„ × 1·647 = Sodium Chloride	.. ..	7·9	5·59
Nitrites (as N ₂ O ₃) .. ..	.. ..	<i>Absent</i>	
Nitrogen as Nitrates .. ..	.. ..	0·71	0·5
Saline Ammonia .. .. .	.. ..	0·0055	0·0039
Albumenoid Ammonia .. ..	.. ..	0·0134	0·0094
Oxygen absorbed in 3 hours at 37° C.	.. ..	0·094	0·066
Hardness—Total .. .. .	.. ..	11·8	8·30
„ Temporary .. .. .	.. ..	4·1	2·91
„ Permanent .. .. .	.. ..	7·7	5·39
Poisonous Metals—Lead .. ..	.. ..	} <i>Absent</i>	
Copper .. .. .	.. ..	

[COPY.]

NORFOLK AND SUFFOLK COUNTY LABORATORIES,
REDWELL STREET,
NORWICH,

9th December, 1909.

Certificate of Analysis of Water.

Sample received from The Lowestoft Water and Gas Company.

No. 502 I.

Mark or Seal: "Collected from tap at Harbour Master's house, North Quay, at 8 a.m., December 1st, 1909, by J. W. Versey."

(The results are in all cases stated in parts per 100,000, which may be altered to grains per gallon by multiplying the figures by 0.7.)

DESCRIPTION OF SAMPLE AS RECEIVED.	Total Solids in Solution.	Ammonia.		Chlorine.	Nitrogen as Nitrates.	Nitrites.	Oxygen absorbed in 4 hours.	Lime.	Magnesia.	Sulphuric Anhy- dride.	Silica, Iron, and Alumina.	Hardness.		Physical Characters.
		Free.	Albumenoid.									Before Boiling.	After Boiling.	
Collected in glass stoppered bottle.	35.20	.002	.007	3.42	.20	nil	.07					16.1	10.10	Bright and clear
Bacterial sample in sterilized bottle.														

RESULTS OF BACTERIOLOGICAL EXAMINATION: Number of Bacteria per cubic centimetre: No growth from 1 c.c.
Quality in respect of Bacillus Coli: Absent in 50 c.c.

REMARKS: This water is chemically in normal condition and bacteriologically exceptionally good, no organisms at all being found in the quantity taken for examination. It is of excellent quality for drinking and general domestic purposes.

(Signed) FRAS. SUTTON & SON.

REMARKS.

On comparison with the results obtained from the last analysis of this water (22nd September, 1909), a notable reduction of nitrates has been effected. A slight decrease in the free and albumenoid ammonia has also taken place. The figures for the latter are, however, still in excess of the usual standard, and a further diminution with regard to this is desirable.

WILLIAM R. SMITH, M.D.,
Principal.

The source of collection has been inspected by myself, in company with the Engineer, during the year.

Sanitation.

JOINT DRAINAGE SCHEME.

This is a scheme for draining the Urban District of Oulton Broad and the rural portions of the Borough. The following progress has been made :

At the March meeting the Surveyor submitted the following approximate estimate of the cost of the work to be executed by the Town Council in connection with the joint scheme of sewerage to be carried out by the Borough and the Urban District of Oulton Broad.

	£	s.	d.
9-in. sewer, Oulton Road (from summit level to junction with combined drain, Woods' Loke), with manholes, flushing penstocks, ventilating shafts and allowance for contingencies	288	15	0
9-in. sewer from summit level (east end of Hall Lane, round to Borough Boundary in Oulton Broad, including Meadow Road), with manholes, flushing penstock and ventilating shaft, and allowance for contingencies	465	0	0
9-in. sewer in Hall Lane, with manholes, flushing penstocks, ventilating shafts, and allowance for contingencies	334	0	6

	£	s.	d.
9-in. sewer in Oulton Road (outside Borough Boundary, from Borough Boundary on the north to Woods' Loke), with manholes, flushing penstocks and ventilating shafts and allowance for contingencies	1153	2	0
9-in. sewer in Fir Lane, with manholes, flushing penstocks and ventilating shafts and allowance for contingencies	312	0	0
9-in. sewer in Beccles Road (from junction with Oulton system to summit level), with manholes, flushing penstocks and ventilating shafts, and allowance for contingencies ..	786	4	0
9-in. sewer in Carlton Road, with manholes, flushing penstocks and ventilating shafts, and allowance for contingencies	361	4	0
12-in. sewer in St. Margaret's Road (from Bridge to Church Road), with manholes, flushing penstocks and ventilating shafts, and allowance for contingencies	487	9	6
Concrete storage tank in Oulton Road (junction with Fir Lane), proportion of cost payable by Corporation, and allowance for contingencies	76	13	0
18-in. sewer in Church Road (from junction with St. Margaret's Road to existing sewer in St. Peter's Street) with manholes, and allowance for contingencies (half cost) ..	531	11	7
Two rows 12-in. C.I. pipes under railway, with all connections complete, and allowance for contingencies (half cost)	262	10	0
	<hr/>		
	£5058	9	7
	<hr/>		

The Committee recommend that the estimate be adopted, and that application be made to the Local Government Board for their sanction to the borrowing by the Council of the above amount.

Mr. Councillor A. B. Capps dissented from this recommendation.

The Town Clerk submitted the following amendment to Clause 17 of the draft agreement between the Town Council and the Urban District Council of Oulton Broad, and the same was approved :—

From and after the connection of the Council's sewers or any of them in accordance with the terms and conditions herein contained the Council performing and observing the terms and conditions on their part herein contained the Corporation shall and do hereby give and grant unto the Council full and free leave licence and permission to discharge and cause or permit the uninterrupted fall or flow into and through the sewers and sewerage works of the Corporation all sewage discharging from the sewers of the said Urban District provided always that the Corporation shall not be liable in damages or otherwise for any unavoidable temporary stoppage of their said sewers from any cause whatever. Provided also that if during heavy rains or extraordinary spring tides the Engineer to the Corporation for the time being shall give to the person in charge of the said Pumping Station No. 1 notice in writing stating that the penstock in the storage tank at the top of Fir Lane will be shut down thereby discontinuing the discharge of the sewage from such storage tank into the sewers of the Corporation such penstock may remain shut for a period not exceeding six hours after the receipt of such notice unless in the meantime such notice shall be withdrawn in writing by the said Engineer provided also that no second notice to shut down the said penstock shall be given by the said Engineer to the said person in charge of the said Pumping Station No. 1 as hereinbefore mentioned until a period of two hours has elapsed after the expiration of the six hours mentioned in the previous notice.

At the October meeting a letter was read dated 23rd ult. from the Local Government Board adverting to the application of the Town Council for sanction to borrow £5,058 for the drainage of parts of the Borough in connection with the drainage of Oulton Broad, that an Inquiry will be held into the application in due course.

NOTE.—In the above Clause “Council” means the Urban District Council of Oulton Broad, “Corporation” means the Town Council of Lowestoft,

SANITARY ACCOMMODATION.

At the January meeting of the Committee the Sanitary Inspector reported that 39 houses and premises were without proper closet accommodation, and the Committee passed an order for their conversion into water closets:

At the same meeting he also reported that 43 houses had water closets without sufficient flushing apparatus, and an order was passed for these to be remedied.

UNDERGROUND CONVENIENCES.

Efforts have been made for years to increase the number of these desirable places, but wherever a site has been selected as suitable, the owners of the property or the adjacent owners have raised strenuous opposition. Apart from the utility of these places, experience has taught us that they would be remunerative from a ratepayer's point of view.

REFUSE REMOVAL.

Refuse is removed regularly and efficiently, as will be seen from the following figures :—

There are now in the Borough 8607 houses from which refuse is collected.

	No. of houses.				
Daily Collections	2162
Tri-Weekly „	60
Bi-Weekly „	6385

Making the total number of emptyings 1,462,530.

During the year 86 requests have been received for special refuse removal, as against 64 for 1908, and 80 for 1907.

REFUSE DESTRUCTOR.

The Refuse Destructor has efficiently consumed 10,558 loads of garbage and house refuse.

SANITARY INSPECTOR'S REPORT FOR 1909.

Inspections, Houses and Premises .. .. .	..	..	..	..	3250
Re-inspections .. .. .	..	..	..	..	1430
Privies converted into Water Closets .. .. .	..	..	..	..	47
Water Closets supplied with Water.. .. .	..	..	..	..	194
Drains Smoke tested .. .. .	..	..	..	..	110

Drains Water tested	245
House Drains ventilated	30
House Drains trapped.. .. .	22
Blocked Drains cleansed and repaired	32
Closets supplied under the Factory and Workshops Act	3
Gutting and Curing Yards inspected	967
Orders received for Dust Removals	86
Visits to Cow Sheds	20
" " (Rural District)	46
Visits to Bake Offices	170
Bake Houses Whitewashed	50
" " " under notice at regular intervals	80
Houses of Infectious Character cleansed and disinfected ..	427
Dead Wells emptied	571
Connections to Public Sewer	60
Slaughter Houses inspected	728
" " whitewashed	63
" " Yards re-paved	2
Milkshops inspected	93
Butchers' Shops inspected (English)	376
" " " (Foreign)	159
Common Lodging House Inspections	38
" " " Whitewashed	9
Notices served for New Dust Bins.. .. .	22
" " " General Nuisances	120
Defective Brick Dust Bins abolished	3
Back-ways reported a Nuisance	6
Workshops Whitewashed	2
Defective W.C.'s	7
Leaky Soil Pipes remedied	10
No. of W.C.'s ventilated by Air Bricks	4
Dirty Houses	2
Dirty Factories	1
Defective Yards Paved	18
Dirty Caravans	3

DISINFECTIONS.

Beds, Mattresses, Bolsters and Pillows	..	..	..	929
Bed Clothing	..	..	..	1232
Personal Clothing	..	..	..	3262
Miscellaneous Articles	..	..	..	268
Sanatorium Mattresses and Blankets	..	..	..	503
„ Personal Clothing	..	..	..	1983
Houses (including schools)	..	..	..	152
Total	..	..		8329

FOOD AND DRUGS ACT, 1899.

Appended is the report of the Inspector :—

SAMPLES TAKEN UNDER THE FOOD AND DRUGS ACT
during 1909.

Milks	..	..	..	..	..	..	..	40
Butters	..	..	..	..	..	..	..	11
Creams	..	..	..	..	..	..	..	5
Beers	..	..	..	..	..	..	..	6
Rum	..	..	..	..	..	..	..	1
Whisky	..	..	..	..	..	..	..	1
Brandy		..	..	..	..	..	..	1
Gin	..	..	..	..	..	..	..	1
Drugs	..	..	..	..	..	..	..	2
Baking Powder			..	..	..	..	..	2
White Pepper	..	..	..	..	..	..	..	2
Total								72

At the February meeting the Medical Officer of Health reported that Dr. Coates, of the Local Government Board, had seen him with reference to the administration of the Food and Drugs Act, within the Borough, and had also inspected Messrs. Morton's factory with reference to the preparation of meat foods,

NORFOLK AND SUFFOLK COUNTY LABORATORIES,
REDWELL STREET, NORWICH,

23rd January, 1909.

CERTIFICATE OF ANALYSIS.

Sample of Sausages.

Received from Dr. Marshall, M.O.H., Lowestoft.

Marked "C. & E. Morton's Real Oxford Sausages."

Sealed Contained in air-tight tin. No. 10444 L.

We have carefully examined the above sample, and find the results of Analysis to be as under :—

"The sausages were found to be free from injurious preservative."

W. LINCOLNE SUTTON.

At the October meeting the Town Clerk reported results of legal proceedings as follows :—

1909.

Sept. 23 Kett v.

Cream with boracic acid.

Result—Fined £2 2s., including costs.

" " "

Cream with boracic acid.

Result—Fined £2 2s., including costs.

" " "

Milk with added water.

Result—Fined £1 10s., including costs.

Oct. 7 "

Cream with boracic acid.

Result—Fined £1, costs £3 19s.

FACTORY AND WORKSHOPS ACT, 1901.

As heretofore the district is energetically looked after by H.M. Inspector at Norwich, and his assistant, Mr. T. C. Taylor, who keeps us constantly posted up with information which is invariably acted upon.

SLAUGHTER HOUSES.

The slaughter-houses have been regularly inspected, and as a rule are regularly lime-washed, in cases wherever necessary, extra lime-washing has been ordered. A public abattoir would be a step in the right direction.

SWINE FEVER, ETC.

The order relating to this disease being no longer required, was revoked in February.

At a meeting in April the Town Clerk reported that an Inspector of the Board of Agriculture and Fisheries called upon him on the 28th inst., and suggested that the Council should make regulations under Section 16 (1) (b) of the Swine Fever Order, 1908, made 23rd April, 1908, requiring every pig dealer to keep a register open to inspection by any Inspector of the Board or Local Authority, with such particulars of his purchases and sales of swine as may be prescribed by the regulations.

The Committee recommend that the regulations be made as suggested.

MILK SHOPS.

There are 6 cowsheds, 21 milk shops and 9 houses from which milk is sold in the town. They have all been regularly inspected.

OFFICIAL CERTIFICATION OF MEAT FOOD PRODUCTS.

At the May Meeting the Town Clerk submitted the following Regulations made by the Local Government Board under the Public Health (Regulations as to Food) Act, 1907.

Circular. Foreign Meat (No. 4).

Port Sanitary Authorities.

Certain Sanitary Authorities.

REGULATIONS UNDER THE PUBLIC HEALTH (REGULATIONS AS TO FOOD) ACT, 1907.

LOCAL GOVERNMENT BOARD,
WHITEHALL, S.W.,

29th April, 1909.

SIR,

I am directed by the Local Government Board to draw attention to the following considerations in connection with the administration of the Public Health (Foreign Meat) Regulations, 1908.

New "Official Certificate" in the case of pork inspected in the Netherlands.

In their circular of 26th January, 1909 (Foreign Meat, No. 3) the Board stated that they had caused to be inserted in the London Gazette of the 22nd January, 1909, a notice containing a schedule of labels

and marks declared to be admissible as Official Certificates in the case of pork, or other edible parts of the pig, which have been subjected to inspection in certain countries. In the case of the Netherlands the form of label scheduled was by the notice declared to be admissible as an Official Certificate only until 1st May, 1909.

On consideration of communications received from the Netherlands Gouvernement in regard to the system of meat inspection in that country which has been established by the Netherlands Inspection of Meat for Export Law, 1907, and regulations thereunder contained in the Decree of 24th June, 1908, the Board have caused to be issued in the London Gazette of the 20th April, 1909, a notice containing in the schedule a description of a new form of label declared to be admissible after 1st May, 1909, in respect of pork and other edible portions of the pig subjected to inspection in the Netherlands. A copy of this notice is appended to this circular.

The Board desire in this connection to draw attention to the paragraphs of their circular of 26th January under the heading "Significance of Official Certificates in the administration of the Regulations."

Official certification of "mess pork" and certain other pork products imported in brine.

The Board have caused inquiries to be made regarding certain imported pork products described as mess pork, salted pigs' tongues in brine, pigs' spare ribs in brine, and pigs' feet in brine, with a view to determining whether these articles when not accompanied by an Official Certificate should be regarded as coming within the definition of "Foreign Meat of Class I." of the Foreign Meat Regulations, 1908. On the facts reported they have expressed the view that these products may at the present time be regarded as coming within the definition of "Foreign Meat Unclassed." The question of official certification in the case of salted pig products generally will be subject to further consideration in connection with any regulations which may be made in future in respect of foreign meat.

Examination of frozen carcasses of pigs.

In the examination under the Regulations of carcasses of pigs for the detection of disease conditions, it is important that inspection should be made of the lymphatic glands and other parts about the throat. Such inspection is, however, at present frequently impracticable in the case of carcasses arriving in a frozen condition, without first thawing or splitting down the carcase or causing the head to be removed.

The Board understand that with a view to obviating the inconvenience and loss of time which such measures entail, importers of frozen pig carcasses are making arrangements for the parts about the throat to be well exposed by the use of skewers before and after freezing. It is desirable that the Medical Officer of Health should bring this arrangement to the notice of importers in cases where difficulty of examination is experienced. The Board would be glad in due course to be informed of the extent to which in practice it is adopted and is found to meet the difficulty referred to.

Packing of frozen "offal."

Large quantities of frozen livers, kidneys, hearts, tongues, ox-skirts, ox-cheeks, plucks, sweetbreads, etc., known in the trade as frozen "offal," are imported at certain ports. This "offal" is usually packed in boxes or bags, and considerable difficulty has been experienced in its examination in consequence of the organs in question being frozen into a solid mass, moulded to the shape of the receptacle. In certain instances sample boxes or bags have been thawed out and the contents ascertained to be unsatisfactory either on account of evidence of disease or of decomposition in the centre of the mass.

It is important that the Medical Officer of Health at the ports concerned should give attention to the condition of consignments of frozen "offal," and should examine them by thawing out specimen boxes or bags and deciding as to further examination of the consignment from the results so obtained. In this respect, however, consideration should be given to the manner in which the articles have been packed. Marked improvements in packing have taken place since the Regulations took effect. Ox kidneys, hearts, tongues, skirts and other "offal" are, in many cases, now being separately frozen in the country of origin before being packed, and arrive in such a way that on opening the package the organs retain their natural shape and permit of individual examination. In the case of such consignments, thawing for inspection need only be adopted in suspicious cases or resorted to as an occasional check.

Livers and plucks.—In the case of packages containing frozen livers and plucks it is specially desirable, with a view to the detection of disease conditions, that the ordinary examination made of a consignment should comprise thawing out specimen boxes. Even in these cases, however, the extent to which this proceeding is necessary is diminished where the organs have been separately frozen and packed in the manner referred to.

Small kidneys and sweetbreads.—Small organs, particularly lambs' sweetbreads, pigs' kidneys, and sheep's kidneys, have frequently been imported in large boxes or bags in which they form a frozen mass which does not admit of inspection without previous thawing. It has been represented to the Board that separate freezing of each organ would in certain cases make it difficult to transport these articles in a marketable condition, and inquiries have been made as to alternative methods of packing which would ordinarily suffice to give the facilities necessary for inspection. The Board are advised that the case can to a large extent be met, in the case of kidneys, by packing so that the frozen contents of the box or bag consist of not more than two layers of kidneys which have not been tightly pressed together; and in the case of sweetbreads, by the use of shallow boxes or other contrivances which secure that the frozen sweetbreads form a comparatively thin layer, *e.g.*, 2 to $2\frac{1}{2}$ inches in depth. The Board understand that some packers, with a view to facilitating inspection under the Regulations, have already adopted this method of packing the small organs in question.

Intimation to importers.—In order to obtain uniformity of practice in this matter at the ports concerned the Board will be glad if the Medical Officer of Health will bring the above considerations to the notice of importers of frozen offal which is not at present satisfactorily packed, in order that any necessary communications may be made to the packing houses abroad at which the offal is prepared for export. It is desirable that special and detailed examination should be made of any imported frozen offal which after such communications is found to be packed in the unsatisfactory manner referred to.

Copies of Circular.

An additional copy of this circular is enclosed for transmission to the Medical Officer of Health. The circular will be placed on sale so that copies may shortly be obtained, either directly or through any bookseller, from Messrs. Wyman & Sons, Fetter Lane, London, E.C.

I am, Sir,
Your obedient Servant,
S. B. PROVIS,
Secretary.

The Clerk to the Port Sanitary Authority, *or*
The Town Clerk, *or*
The Clerk to the District Council,

APPENDIX.

NOTICE INSERTED IN THE LONDON GAZETTE OF 20TH APRIL, 1909.

THE PUBLIC HEALTH (Foreign Meat) REGULATIONS, 1908.

WE, THE LOCAL GOVERNMENT BOARD, in pursuance of the Public Health (Foreign Meat) Regulations, 1908, HEREBY GIVE NOTICE that, for the purposes of those Regulations, the Official Certificate of which the details are set forth in the representation or design or in the verbal description comprised in the schedule appended to and forming part of this Notice is, subject to such instructions as are comprised in the notes subjoined to the representation or design or verbal description, hereby declared to be admissible, in the case of the Netherlands, during the period beginning on the first day of May, One thousand nine hundred and nine, and ending on the thirtieth day of September in the same year, in the manner, to the extent, and subject to the rules and conditions prescribed in this Notice, as evidence that the pig from which any foreign meat is derived has been certified by a competent authority in the Netherlands, as the place of origin, to be free from disease at the time of slaughter, and that the meat has been certified by the like authority to have been dressed or prepared and packed with the needful observance of all requirements for the prevention of danger arising to public health from the meat as an article of food :

AND FURTHER, with respect to the manner, to the extent, and to the rules and conditions in, to, and subject to which every such Official Certificate is admissible as evidence for any such purpose as is herein-before described, We hereby prescribe as follows, that is to say :—

- (i) The Official Certificate used in relation to foreign meat, or in relation to a box, case, receptacle or package containing foreign meat shall be admissible as aforesaid only where the meat is derived from a pig.
- (ii) The Official Certificate in the form of a label shall be admissible as aforesaid only where the label is securely affixed or attached to any foreign meat, or to any box, case, receptacle or package containing foreign meat ; and where the label so affixed or attached has not, in any other circumstances, or on any other occasion, been used as an Official Certificate.
- (iii) In this Notice, any word or expression to which a special meaning is assigned by the Public Health (Foreign Meat) Regulations, 1908, has the same meaning as in those Regulations.

SCHEDULE.

NETHERLANDS.

A label according to the subjoined representation or design and verbal description, that is to say :—

(Copy of label here inserted; see below).

NOTE.—In the use of any label according to this representation or design, the spaces occupied by the figures and word “Oss II.,” and by the letters and figures “a. No. 9217,” will be filled in with substituted figures, words, and letters, denoting the slaughter-house or other building or place at which the meat has been inspected, and other particulars required for administrative information.

Verbal Description.

A slip of cardboard or of other suitable material containing the undermentioned particulars :—

Obverse.

The Royal Arms, the number or name of the slaughter-house, or other building or place at which the meat has been inspected, a serial number, the signature of an authorized officer, and the words :—

NEDERLAND.

Vleesch voor uitvoer goedgekeurd overeenkomstig de Wet op de uitvoerkeuring van vleesch 1907 (Staatsblad no. 217) en het Koninklijk Besluit van 24 Juni 1908, no. 50.

Datum.....190

De Rijkskeurmeester.

Naam.....

Reverse.

The words :—“Meat inspected for export according to the Dutch Law of 16 July, 1907, and the Royal Decree of 24 June, 1908, no. 50.”

Also a crossing in the form of two parallel straight lines within which are the words :—

“For export to the United Kingdom of Great Britain and Ireland.”



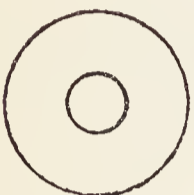
Given under the Seal of Office of the Local Government Board, this nineteenth day of April, in the year One thousand nine hundred and nine.

John Burns, President.

S. B. Provis, Secretary.


NETHERLANDS LABEL.

FRONT OF LABEL.

	Oss. II.	a. No 9217	
			<p>N E D E R L A N D.</p> <p>Vleesch voor uitvoer goedgekeurd overeenkomstig de Wet op de uitvoerkeuring van vleesch 1907 (<i>Staatsblad</i> n°. 217) en het Koninklijk Besluit van 24 Juni 1908, n°. 50.</p> <p>Datum: 190</p> <p><i>De Rijkskeurmeester.</i></p> <p>Naam:</p>

Completed with the registered number of establishment, name of district, serial number, (e.g. Oss. II a. No. 9217, in specimen) date, and signature.

BACK OF LABEL.

<p>Meat inspected for export according to the Dutch Law of 16 July 1907 and the Royal Decree of 24 June 1908, n°. 50.</p> <hr/> <p>For export to the United Kingdom of Great Britain and Ireland.</p>	
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At the October meeting the Town Clerk submitted the following Regulations made by the Local Government Board under the Public Health (Regulations as to Food Act), 1907 :

Circular. Unsound Food. (No. 5.)

Port Sanitary Authorities.

Certain Sanitary Authorities.

REGULATIONS UNDER THE PUBLIC HEALTH (REGULATIONS AS TO FOOD) ACT, 1907.

LOCAL GOVERNMENT BOARD,

WHITEHALL, S.W.,

26th July, 1909.

SIR,

I am directed by the Local Government Board to advert to their circular of the 16th September, 1908, on the subject of the Regulations under the Public Health (Regulations as to Food) Act, 1907, and to draw your attention to the section of the circular which sets out the main considerations which should guide administrative action under the Public Health (First Series, Unsound Food) Regulations, 1908.

In that section, attention has been drawn to the powers conferred upon medical officers of health by Articles IV., V., VI., and VIII., of the Regulations to deal with foods which are diseased, unsound, or unfit for human consumption, and to the notices in writing which are necessary in connection with procedure under the above Articles.

With the object of facilitating this procedure, and obtaining uniformity at the ports concerned, the Board have now prepared the specimen forms which are appended hereto.

Form A.—Notice of detention of unsound food. Agreement made at the time of inspection for the surrender of the food for destruction, etc.

Form A is intended for use in cases where articles of food are recognised to be unsound at the time of inspection, and the importer or his authorised representative (*e.g.*, local agent, shipper, or wharfinger)

agrees at that time to hand them over for destruction or other treatment approved by the medical officer of health. Hitherto such cases have usually been dealt with by means of "surrender" or "consent" notes, and in some instances merely by verbal agreement. Such agreements are, however, insufficient for the purpose. Considerable inconvenience and misunderstanding have been caused in some cases of this kind through the absence of written evidence of the arrangement made.

By the use of Form A the voluntary "surrender" of unsound food in these circumstances can be effected consistently with Article IV. (5) of the Regulations. The form provides for an interchange of the necessary documents between the inspecting officer and the importer or his authorised representative, and the Board consider it desirable that in future the procedure provided for by this form should be followed in the cases referred to.

Forms B and C.—Notice of detention of unsound food. Communication with the Importer.

Forms B and C are based on forms which have been found satisfactory in practice in the Port of London. They are together intended for use in cases where the unsound food is not surrendered to the medical officer of health for destruction or approved treatment at the time of inspection.

Form B is the notice of detention to be given by the inspecting officer at the time of examination to the person in charge of the articles of food (*e.g.*, dock superintendent, wharfinger, warehouse keeper, master of the ship, or agent of the importer), and specifies the place where they are to be detained.

The notice in Form C gives the importer the alternative of :—

- (1) Disposing of the articles of food in the manner approved by the medical officer of health, and indicated by him on the reply sheet which is attached to Form C, or
- (2) Leaving the matter to take its course before a Justice.

If the importer agrees to accept the arrangement indicated to him by the medical officer of health, he will sign the undertaking set out in the reply sheet and return it forthwith.

If the signed reply sheet is not returned to the medical officer of health, or an equivalent document received by him, within a reasonable time, it will be his duty to have the articles of food examined by a Justice, and to deal with them accordingly.

The reply sheet of Form C should in each instance be filled in by the medical officer of health in such a way as clearly to indicate to the importer the manner of disposal which the medical officer of health is prepared to approve. This may be done by appropriately filling the blank spaces and by striking out the printed words which do not apply. Examples are given in the note appended to the form.

Forms D, E and F. Notices as to facilities for examination, and detention pending examination of samples. Vouchers.

Form D is intended for use in cases where necessity arises for making application in writing to obtain facilities for the examination of articles of food (Article IV., (1), (2), (3)).

Form E is the notice required by Article VIII. to be sent to the importer in those cases where the medical officer of health desires to detain the consignment pending the result of special examination of samples.

Form F is a form of voucher to be supplied, when requested, in cases where samples have been taken from a consignment under Article VIII. of the Regulations.

I am, Sir,
Your obedient Servant,
S. B. PROVIS,
Secretary.

The Clerk to the Port Sanitary Authority, *or*
The Town Clerk, *or*
The Clerk to the District Council.

APPENDIX

Notice.

FORM A.

PUBLIC HEALTH (FIRST SERIES, UNSOUND FOOD) REGULATIONS, 1908.

Articles IV. (4) and (5).

NOTICE OF DETENTION OF UNSOUND FOOD.

*Port of**Sanitary Authority.*

Office .

Date 19 .

To*

THIS is to give notice that the undermentioned articles of food are unsound, unwholesome, or unfit for human consumption, and that the same may not be removed from

until examined by a Justice, without my permission.

This permission will be given if you signify in writing on the counterfoil hereof that you consent to their being removed for immediate destruction under my supervision, or for such other treatment as I may approve.

.....*Medical Officer of Health.*

Details.

Description and quantity

Where detained

Name of vessel

Where lying

.....*Inspector.*

*The Importer, or his authorised representative (*e.g.*, local agent, shipper, or wharfinger).

FORM A.

CONSENT TO REMOVAL OF UNSOUND FOOD.

Date

19 .

*To the Medical Officer of Health,**Port of* .

I, the undersigned, being the importer or the authorised representative of the importer of the following articles of food, viz. :—

detained at

ex

lying at

hereby consent to their removal for immediate destruction under your supervision, or for such other treatment as you may approve.

Signature .

Address .

Representing .

Note on Form A.

It may be found convenient to have this form bound as a book for use at the dock side. The Notice filled up by the Inspector will supply sufficient evidence to the owner of the articles of food that they have been dealt with by the Sanitary Authority, and the counterfoil, signed by the importer, or his representative, will provide a record for the Sanitary Authority of the fact that the articles in question had been voluntarily surrendered for destruction,

This counterfoil will be retained in the bound book.

FORM B.

PUBLIC HEALTH (FIRST SERIES, UNSOUND FOOD) REGULATIONS,
1908. Article IV. (4).

NOTICE OF DETENTION.

Port of *Sanitary Authority.*

To the Medical Officer of Health.

Date 19 .

Notice of detention has been given in the following case :—

Particulars.

Description and quantity

Where detained

If sorting required

Importer's name and address

Name of vessel

Port and Official No.

Where lying

From

Date of arrival

Where discharged and when

.....Inspector,

Counterfoil; to be retained.

Notice.

FORM B.

PUBLIC HEALTH (FIRST SERIES, UNSOUND FOOD) REGULATIONS, 1908.

ARTICLE IV. (4).

NOTICE OF DETENTION.

Port of Sanitary Authority.

Office

Date 19 .

To*

THIS is to give notice that the undermentioned articles of food are unsound, unwholesome, or unfit for human consumption, and that the same are not to be removed from without my permission.

.....*Medical Officer of Health.**Particulars.*

Description and quantity

Where detained

Name of vessel

Port and Official No.

Where lying

From

Date of arrival

Where discharged and when

.....*Inspector.*

*The Importer, Master of the Ship, or other person having charge of the articles of food.

FORM C.

PUBLIC HEALTH (FIRST SERIES, UNSOUND FOOD) REGULATIONS, 1908.

ART. IV. (4).

NOTICE OF DETENTION.

*Port of**Sanitary Authority.*

Office

Date

19 .

To*

This is to give notice that the undermentioned articles of food are detained as unsound, unwholesome, or unfit for human consumption, and that the same may not be removed from

until examined by a Justice, without my permission.

If you desire to have the articles dealt with otherwise than by a Justice, the annexed reply sheet should be signed and forwarded to me by return of post.

.....*Medical Officer of Health.*

*The Importer of the articles of food.

FORM C. (REPLY SHEET.)

(TO BE RETURNED TO THE MEDICAL OFFICER OF HEALTH AT THE
OFFICE OF THE PORT SANITARY AUTHORITY.)

Date

19 . .

*To the**

and all others whom it may concern.

The undersigned, being importers of

Mark.	Articles of Food.

lying at

ex

which have been declared by the Medical Officer of Health of the
Port of Sanitary Authority to be
unsound, unwholesome, or unfit for human consumption, do hereby
authorise and instruct you to†

the above articles of food under the
supervision of the Medical Officer of Health of the said Sanitary
Authority, and to destroy, or deliver to
for destruction, any of the said articles declared by the said Medical
Officer of Health to be unsound, unwholesome, or unfit for human
consumption.

Signature

Address

*The person in charge of the articles of food.

†See below,

NOTES ON FORM C.

† EXAMPLES of the MANNER in which the WORDING of the REPLY SHEET may be ALTERED to meet PARTICULAR CASES.

(Words in square brackets to be erased : words in italics should be manuscript additions.)

(a) [the above articles of food under the supervision of the Medical Officer of Health of the said Sanitary Authority, and to destroy, or] deliver to the *Port Sanitary Authority or their officer* for destruction [any of] the said articles consumption.

The above would be used where the whole of the consignment referred to in the notice, *e.g.*, canned meats, was unfit for human consumption, and the Medical Officer of Health considered it necessary that it should be destroyed by the Port Sanitary Authority.

(b) *sort* the above articles of food under the supervision of the Medical Officer of Health of the said Sanitary Authority, and to destroy, [or deliver to for destruction] any of the said articles consumption.

The above would be employed when a proportion of the articles, *e.g.*, bananas, are supposed to be unsound, and it is considered desirable to give the consignees the opportunity of sorting the sound from the unsound, and to allow them or their agents to dispose of the unsound articles under the supervision of the Medical Officer of Health.

(c) *sort* the above articles of food under the supervision of the Medical Officer of Health of the said Sanitary Authority, and to [destroy or] deliver to the *Port Sanitary Authority or their officer* for destruction any of the said articles consumption.

The above provides for a similar case to (b), except that it is desirable that the articles of food found to be unsound, *e.g.*, canned meats, should be dealt with by the Port Sanitary Authority.

(d) *destroy* the above articles of food under the supervision of the Medical Officer of Health of the said Sanitary Authority, [and consumption].

The above is applicable where the whole of the articles, *e.g.*, fruit, are unfit for human consumption, and where there is no objection to the consignee, or his agent, himself destroying them under the supervision of the Medical Officer of Health.

Other variations in the wording can, of course, be employed to meet special cases,

Counterfoil.

FORM D.

PUBLIC HEALTH (FIRST SERIES, UNSOUND FOOD) REGULATIONS, 1908.

Article IV. (1), (2), (3).

EXAMINATION NOTICE.

Port of

Sanitary Authority.

To the Medical Officer of Health

An Examination Notice has been sent

To

Articles

Place of Deposit

Date

Time

.....*Inspector.*

Notice.

FORM D.

PUBLIC HEALTH (FIRST SERIES, UNSOUND FOOD) REGULATIONS, 1908.

Article IV. (1), (2), (3).

EXAMINATION NOTICE.

Port of Sanitary Authority.
Office

Date 19 .

To*

and to all others whom it may concern.

I have to inform you that the examination of certain articles of food, viz.:

at present deposited in
is desirable. I have therefore to request that you will afford me,
or any person duly authorised on my behalf, proper access to the
ship, lands, or premises, and further, that you will arrange for such
unpacking, opening, or uncovering of cargo or goods as may be necessary
for the purpose of such examination.

.....*Medical Officer of Health.*

* The Importer, Master of the Ship, or other person having custody of lands or premises.

Counterfoil.

FORM E.

PUBLIC HEALTH (FIRST SERIES, UNSOUND FOOD) REGULATIONS,
1908. Article VIII. (2).

NOTICE OF SPECIAL PROCEDURE.

Port of Sanitary Authority.

To the Medical Officer of Health.

Notice as to special procedure has been served on
Articles

Place of deposit

Date _____

Time

.....Inspector.

Notice.

FORM E.

PUBLIC HEALTH (FIRST SERIES, UNSOUND FOOD) REGULATIONS,
1908. Article VIII. (2).

NOTICE AS TO SPECIAL PROCEDURE REQUIRED FOR EXAMINATION
OF FOODS.

Port of *Sanitary Authority.*
Office

Date 19 .

To*

This is to give notice that special procedure is necessary for the examination of the following articles of food :—

Mark.	Description.

and that the same are not to be removed from
for a period of hours without my consent ; and further,
that you should afford such facilities for the completion of the said
examination as I, or any person duly authorised on my behalf, shall
direct.

.....*Medical Officer of Health.*

* The Importer, or other person who has the custody or control of the articles
of food.

FORM F.

PUBLIC HEALTH (FIRST SERIES, UNSOUND FOOD) REGULATIONS,
1908. Article VIII. (1).

Port of

Sanitary Authority.

Voucher in respect of sample taken for purpose of examination.

Description of Parcel.				Quantity taken as sample.
Mark.	Quantity.	Package.	ex Ship.	

.....*Inspector.*

Date.....

NOTE.—This Form should be bound in a book, with carbon duplicate.

(27th September, 1909).

FOREIGN MEAT REGULATIONS.
(AMENDMENT, 1909.)



TO ALL PORT SANITARY AUTHORITIES ;—

To all other Sanitary Authorities and Local Authorities as herein defined ;—

To all Officers of Customs and Excise ;—

To all Medical Officers of Health of the Sanitary Authorities and Local Authorities aforesaid ;—

To all Masters of Ships ;—

And to all others whom it may concern.

WHEREAS, in relation to articles of food, the Public Health (Foreign Meat) Regulations, 1908, provide for the use of an Official Certificate, for the Classification of Foreign Meat, and for the combined action of Authorities for the purposes of those Regulations ;

And whereas it is expedient that, with respect to the aforesaid matters and to other purposes, the Public Health (Foreign Meat) Regulations, 1908, be altered, and that, accordingly, such Regulations as are hereinafter set forth be made ;

And whereas the Commissioners of Customs and Excise have signified their consent to the said Regulations, so far as they apply to the Officers of Customs and Excise :

NOW, THEREFORE, We, the Local Government Board, by this Our Order, and in the exercise of the powers conferred upon Us by the Public Health Act, 1875, the Public Health (London) Act, 1891, the Public Health Act, 1896, and the Public Health (Regulations as to Food) Act, 1907, and of every other power enabling Us in that behalf, do make the following Regulations, that is to say :

ARTICLE I.—Article I. of the Public Health (Foreign Meat) Regulations, 1908, shall be revoked : and those Regulations shall be altered so that they shall have effect, with the substitution for the Article so revoked of the following Article, namely :—

“ ARTICLE I.—In these Regulations, unless the contrary intention appears—

- “ (a) Words importing the masculine gender include females ;
- “ (b) Words in the singular include the plural, and words in the plural include the singular ;
- “ (c) Expressions referring to writing include references to printing and other modes of representing or reproducing words in a visible form ;
- “ (d) The expression ‘ cattle ’ includes a bull, cow, ox, heifer, calf, ram, ewe, wether, goat, and kid ;
- “ (e) expression ‘ pig ’ includes a boar, sow, and hog ;
- “ (f) The expression ‘ meat ’ means pork, the flesh of cattle, any other edible part of a pig or of cattle, or a substance, compound, material, or article of which pork, or the flesh of cattle, or any other edible part of a pig or of cattle is an ingredient ;
- “ (g) The expression ‘ foreign ’ used in relation to meat means brought from a place situate elsewhere than in the United Kingdom, the Channel Islands, or the Isle of Man ;
- “ (h) The expression ‘ Official Certificate ’ used in relation to foreign meat or in relation to a box, case, receptacle, or package containing foreign meat, means a certificate, label, mark, stamp, or other voucher which, by a notice published in the London Gazette at any time during the period of twelve months beginning on the First day of October, One thousand nine hundred and eight, or which, by a notice published in the London Gazette after the expiration of that period, is declared to be admissible in the manner, to the extent, and subject to the rules and conditions, prescribed in that notice, as evidence that the cattle or pig from which the meat is derived has been certified by a competent authority in the place of origin to be free from disease at the time of slaughter, and that the meat has been certified by the like authority to have been dressed or prepared, and packed with the needful observance of all requirements for the prevention of danger arising to public health from the meat as an article of food ; and, for the purposes of this definition and of any Regulations under the Public Health (Regulations as to Food) Act, 1907, every Official

Certificate which, by a notice published in the London Gazette at any time during the period of twelve months beginning on the First day of October, One thousand nine hundred and eight, is declared to be admissible as aforesaid, shall, notwithstanding anything prescribed in the notice, continue to be so admissible until, by a further notice to be published in the London Gazette, the said Official Certificate is declared to be no longer so admissible ;

“ (i) The expression ‘ Foreign Meat of Class I. ’ means foreign meat in the form

“ (A) Of scrap meat, namely, meat which, whether it is fresh, or has, before importation, been subjected to a process of freezing or other refrigeration, or to chemical or other treatment, with or without the addition of any preservative or colouring substance—

“ (i) consists of scraps, trimmings or other pieces (whether with or without bone in its natural state of attachment) of such shape or in such condition as to afford insufficient means of identification with definite parts of a carcase ; and

“ (ii) has not, before importation, been made ready for human consumption in the form of a sausage, or of another prepared or manufactured article of food ;

“ or

“ (B) Of tripe, namely, any edible part of the stomach, or

“ Of a tongue, or kidney,

to which formalin, or a solution, or other preparation of, or comprising formic aldehyde ; or a compound containing fluorine or boron ; or salicylic acid, formic acid, sulphurous acid, benzoic acid, or any compound of any such acid has been applied ;

“ or

“ (c) Of severed parts of the carcase of a pig, or of other edible parts of a pig, which have not, before importation, been salted, cured, pickled, dried, or smoked, or otherwise prepared in the manner in which bacon

or ham is ordinarily prepared, and which are not contained in a box, case, receptacle, or package with an Official Certificate impressed thereon, or affixed or attached thereto ;

“ or

“ (D) Of severed parts of the carcass of a pig, or of other edible parts of a pig, which have, before importation, been salted, cured, pickled, dried, or smoked, or otherwise prepared in the manner in which bacon or ham is ordinarily prepared, and which are not contained in a box, case, receptacle or package with an Official Certificate impressed thereon, or affixed or attached thereto, and which, in the case of the severed parts of the carcass, are without the lymphatic glands about those parts in their natural position ;

“ or

“ (E) Of meat which, whether derived from cattle or a pig, is in the form of a carcass, or of a part of a carcass, and, in either case, comprises the ribs, and is without any such membrane as, in its natural position, forms the lining of the cavity enclosed by the ribs ;

“ (j) The expression ‘ Foreign Meat of Class II. ’ means foreign meat which, being in the form of the entire carcass of a pig, is without the head in its natural state of attachment to the carcass, or is without the lymphatic glands about the throat, or about any other part of the carcass, in their natural position ;

“ (k) The expression ‘ Foreign Meat of Class III. ’ means foreign meat which is in the form of severed parts of the carcass of a pig, or of other edible parts of a pig, which is not and does not comprise any foreign meat of Class I., or any foreign meat of Class II., and which is contained in a box, case, receptacle, or package with an Official Certificate impressed thereon, or affixed or attached thereto ;

“ (l) The expression ‘ Foreign Meat Unclassed ’ means foreign meat other than foreign meat of Class I., foreign meat of Class II., or foreign meat of Class III. ;

- “ (m) The expression ‘ importer ’ means any person in the United Kingdom who, either as owner or consignee, agent or broker, is entitled to the possession, custody, or control of any foreign meat ;
- “ (n) The expression ‘ ship ’ includes a vessel or boat ;
- “ (o) The expression ‘ Officer of Customs and Excise ’ includes any person acting under the authority of the Commissioners of Customs and Excise ;
- “ (p) The expression ‘ Master ’ used in relation to a ship includes the officer, or other person for the time being in charge or command of the ship ;
- “ (q) The expression ‘ Sanitary Authority ’ means every Port Sanitary Authority, and every Council of a Municipal Borough or other Urban District, and every Rural District Council whose borough or district includes or abuts on any part of a Customs port which part is not within the jurisdiction of Port Sanitary Authority ;
- “ (r) The expression ‘ the District ’ means the District of a Sanitary Authority ;
- “ (s) The expression ‘ Medical Officer of Health ’ includes any duly qualified Medical Practitioner appointed or employed by a Sanitary Authority to act in the execution of these Regulations ; and any other person appointed or employed by the Sanitary Authority under these Regulations to exercise any powers, or to discharge any duties assigned to the Medical Officer of Health ;
- “ (t) The expression ‘ Local Authority ’ means every Council of a Municipal Borough or other Urban District and every Rural District Council, not being a Sanitary Authority within the meaning of these Regulations, and includes the Common Council of the City of London and every Council of a Metropolitan Borough ;
- “ (u) The expression ‘ area ’ used in relation to a Local Authority means the area subject to the jurisdiction of the Local Authority for the purposes of the Public Health Act, 1875, or of the Public Health (London) Act, 1891, as the case may be.”

Commencement and Extent of operation of Amending Regulations.

ARTICLE II.—These Regulations shall come into operation on the Thirtieth day of September, One thousand nine hundred and nine, and then and thereafter the Public Health (Foreign Meat) Regulations, 1908, and any Order theretofore made in pursuance of Article XVI. of those Regulations shall apply and have effect and shall be enforced and executed in such form and in such manner as will give full effect to the alterations made by these Regulations, and as if, throughout the Public Health (Foreign Meat) Regulations, 1908, references to an Officer of Customs and Excise were substituted for references to an Officer of Customs, and as if, throughout any such Order, references to the Public Health (Foreign Meat) Regulations, 1908, as altered by these Regulations, were substituted for references to the Public Health (Foreign Meat) Regulations, 1908, and references to an Officer of Customs and Excise were substituted for references to an Officer of Customs.

Short title.

ARTICLE III.—These Regulations may be cited as “The Public Health (Foreign Meat) Amending Regulations, 1909.”

Given under the Seal of Office of the Local Government Board, this Twenty-seventh day of September, in the year One thousand nine hundred and nine.



JOHN BURNS,
President.

S. B. PROVIS,
Secretary.

Notice.—The Public Health Act, 1896, provides by subsection 3 of Section 1 that if any person wilfully neglects or refuses to obey or carry out, or obstructs the execution of any regulation made under any of the enactments mentioned in that Act he shall be liable to a penalty not exceeding One Hundred Pounds, and in the case of a continuing offence to a further penalty not exceeding Fifty Pounds for every day during which the offence continues.

The power of making regulations under the Public Health Act, 1896, and the enactments mentioned in that Act is enlarged by the Public Health (Regulations as to Food) Act, 1907.

Date of Publication in the London Gazette, 28th September, 1909,

Circular. Foreign Meat. (No. 6).

Port Sanitary Authorities.

Certain Sanitary Authorities.

REGULATIONS UNDER THE PUBLIC HEALTH (REGULATION AS TO FOOD) ACT, 1907.

LOCAL GOVERNMENT BOARD,

WHITEALL, S.W.,

30th September, 1909.

SIR,

I am directed by the Local Government Board to advert to the Public Health (Foreign Meat) Regulations, 1908, which were made by them under the Public Health (Regulations as to Food) Act 1907, for the purpose of preventing danger to the public health arising from the importation of certain kinds of meat foods, and to the circular letters (Nos. 1 to 4) with respect to the Regulations which they issued on the 16th September and 12th December, 1908, and 26th January and 29th April, 1909.

The experience which has been obtained of the working of the Regulations has shewn the necessity for some addition to or amendment of their provisions in the directions indicated below, and the Board have accordingly issued further Regulations modifying in certain particulars the Regulations of 1908. Copies of the new Regulations are enclosed.

The amending Regulations are confined to substituting a new Article for Article I. (" Interpretation ") of the Order of 1908, and do not make any alteration in the provisions of Articles II. to XVII. of that Order which prescribe the procedure to be followed with respect to imported meat. The substituted Article follows, verbatim, the terms of Article I. of the Regulations of 1908, except in the cases of paragraphs (h), (i), (j), (k), and (o).

The definitions in Article I. of the new Regulations are to be read into the Regulations of 1908, and into any Order made under Article XVI. of those Regulations.

“ OFFICIAL CERTIFICATES.”

By notices published in the *London Gazette*, certain Official Certificates have been declared admissible for the purposes referred to in paragraph (b) of Article I. of the Regulations of 1908 during the period ending on the 30th September, 1909.

Under the new Regulations further Official Certificates may be declared admissible for these purposes by a like notice. Moreover, any existing or future Official Certificate will continue to be admissible until by a further notice published in the *London Gazette* it is declared to be so no longer.

“ *Official Certificates* ” now Recognised.

Canada, Denmark, Netherlands, New Zealand.—The labels and marks relating to pork which has been subjected to inspection in these countries have been described in the Board’s Circulars of January 26th, 1909, and April 29th, 1909.

Belgium.—On consideration of communications received from the Belgian Government in regard to the system which has been organised in that country for the inspection of meat intended for export to the United Kingdom, the Board have caused to be published in the *London Gazette* of Friday, 24th September, 1909, a notice containing in the schedule a description of a label which is declared to be admissible as an “ Official Certificate,” in respect of pork and other edible portions of the pig subjected to inspection in Belgium.

Victoria and New South Wales.—On consideration also of communications received from the Governments of the States of Victoria and New South Wales, labels or marks attesting inspection in those States have also been recognised as “ Official Certificates ” by publication in the notice referred to.

A copy of the notice in the *London Gazette* including the schedule thereto in which the Belgian and Australian labels are described, is appended to this circular.

Significance of Official Certificates in the Administration of the Regulations.

The Board may draw attention to the observations on this subject which were made in their circular of the 26th January last.

DEFINITIONS OF FOREIGN MEAT FOR THE PURPOSE OF THE REGULATIONS.

The amending Regulations make certain alterations in the description of the foreign meats which are comprised in the definitions of "Foreign Meat of Class I." and "Foreign Meat of Class II." in the Foreign Meat Regulations, 1908.

It will be remembered that the Regulations require that where as a result of a notice received from an officer of Customs or otherwise, the Medical Officer of Health has ascertained that any imported meat comes within the definition of "Foreign Meat of Class I." or "Foreign Meat of Class II.," he should give a notice forbidding the removal of the meat for any purpose other than exportation (*see* Article III. (5) and Article V.). If an importer to whom a notice of this kind has been given desires not to export the meat, but to use it for some purpose other than sale for human consumption, the procedure to be adopted to enable him to do so is provided in those Regulations (Articles VI. and VIII.).

Scrap Meat.

The Foreign Meat Regulations, 1908, included boneless scrap meat in the definition of "Foreign Meat of Class I." Scrap meat or trimmings of carcasses which contain bone are, however, occasionally imported. They are usually contained in barrels or bags and described as "neck meat," "rib meat," or by other names. Their importation must be considered open to objections similar to those which attach to the importation of boneless scrap meat.

The amending Regulations include meat which consists of scraps, trimmings, or other pieces, of such shape or in such condition as to afford insufficient means of identification with definite parts of a carcass, in the definition of "Foreign Meat of Class I.," whether or not bone is present in such scraps or pieces. In any case where the Medical Officer of Health ascertains that meat of the kind referred to is being imported, the necessary notice applicable to "Foreign Meat of Class I." should be given.

Bacon, ham, salted mess pork, salted pigs' tongues, salted pigs' heads, etc.

The Foreign Meat Regulations, 1908, do not require that bacon and ham, or certain salted parts of the carcass of the pig which are prepared in a manner comparable to that in which bacon and ham are prepared, should necessarily be attested by an "Official Certificate" in evidence of approved inspection in the country of origin as a condition of their importation for use for human food. In the case of uncertified packages containing pigs' heads and other salted products, however, the meat has on several occasions been found to show evidence of tuberculosis or other disease conditions. In other cases the lymphatic glands which would naturally be present in the portions of the salted carcass have been removed before importation in such a way as to suggest that the object of the removal of the glands has been to conceal the fact that they were affected by disease, or to prevent any attempt to discover the existence of disease on arrival in this country.

In regard to these salted articles, the amending Regulations include any severed part of the carcass of the pig which is not contained in a package bearing an "Official Certificate" in the definition of "Foreign Meat of Class I." if the lymphatic glands about such part are not present in their natural position.

The stomachs or "maws" of pigs are sometimes imported, in brine or packed in salt, for human consumption. The amending Regulations include any salted part of the pig which is not a severed part of the carcass in the definition of "Foreign Meat of Class I." if it is not imported in a package which bears an "Official Certificate."

Foreign bacon, ham and salted pig products, will be detained by Customs officers on receipt of an intimation from the Medical Officer of Health that he desires to examine salted pig products which arrive from some specified country or port of shipment, or particular consignments of such meat. Requests for detention should contain particulars sufficient for the identification of the meat in question by the Customs officers. It will usually be practicable for the Medical Officer of Health to examine salted pig products for the purpose of the Regulations without first requesting formal detention by Customs officers,

" Stripped " meat.

The Board's attention has been called to the fact that meat, particularly beef, is sometimes imported in the form of carcasses, or portions of carcasses, from which the pleura or lining membranes of the thorax have been stripped. Removal of the pleura is frequently practised in order to conceal evidence of disease conditions. The amending Regulations include any meat which comprises the ribs, but which on importation is ascertained to be without the pleura in the category of " Foreign Meat of Class I." The addition thus made to the Regulations should receive special attention in connection with inspection made of imported beef.

Copies of Circular.

An additional copy of this Circular is enclosed for transmission to the Medical Officer of Health. The New Regulations and this Circular will be placed on sale so that copies may shortly be obtained, either directly or through any bookseller, from Messrs. Wyman & Sons, Ltd., Fetter Lane, London, E.C.

I am, Sir,
Your obedient Servant,
S. B. PROVIS,
Secretary.

The Clerk to the Port Sanitary Authority, *or*
The Town Clerk, *or*
The Clerk to the District Council.

APPENDIX.

NOTICE PUBLISHED IN THE " LONDON GAZETTE " OF FRIDAY,
24TH SEPTEMBER, 1909.

THE PUBLIC HEALTH (FOREIGN MEAT) REGULATIONS, 1908.

WE, THE LOCAL GOVERNMENT BOARD, in pursuance of the Public Health (Foreign Meat) Regulations, 1908, hereby give notice that, for the purposes of those Regulations, each Official Certificate of which the details are set forth in any representation or design or in any verbal description comprised in the schedule appended to and forming

part of this Notice is, subject to such instructions as are comprised in the notes subjoined to the representation or design or verbal description, hereby declared, in relation to each country of which, as a place of origin, the name is prefixed as a heading to that representation, or design, or verbal description, to be admissible, during the period of twelve months beginning on the First day of October, One thousand nine hundred and eight, in the manner, to the extent, and subject to the rules and conditions prescribed in this Notice, as evidence that the pig from which any foreign meat is derived has been certified by a competent authority in the place of origin to be free from disease at the time of slaughter, and that the meat has been certified by the like authority to have been dressed or prepared, and packed with the needful observance of all requirements for the prevention of danger arising to public health from the meat as an article of food :

AND FURTHER, with respect to the manner, to the extent, and to the rules and conditions in, to, and subject to which every Official Certificate is admissible as evidence for any such purpose as is hereinbefore described, We hereby prescribe as follows, that is to say :—

- (i.) An Official Certificate used in relation to foreign meat, or in relation to a box, case, receptacle or package containing foreign meat shall be admissible as aforesaid only where the meat is derived from a pig.
- (ii.) An Official Certificate in the form of a label shall be admissible as aforesaid only where the label is securely affixed or attached to any foreign meat, or to any box, case, receptacle or package containing foreign meat ; and where the label so affixed or attached has not, in any other circumstances, or on any other occasion, been used as an Official Certificate.
- (iii.) In this Notice, any word or expression to which a special meaning is assigned by the Public Health (Foreign Meat) Regulations, 1908, has the same meaning as in those Regulations.

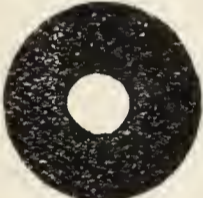

SCHEDULE.

PLACES OF ORIGIN AND OFFICIAL CERTIFICATES.

BELGIUM.

I. A label according to the subjoined representation or design and verbal description, that is to say :—

Obverse.

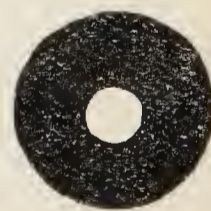
	Commune de _____ TUEURIE N° _____	
		ROYAUME DE BELGIQUE
		Viande pour l'exportation déclarée propre à la consommation conformément à l'Arrêté royal du 23 mars 1901 (1).
		Date _____
		L'EXPERT AGRÉÉ PAR LE GOUVERNEMENT : <i>Signature,</i> _____
(1) Le porc n'est pas atteint de tuberculose. L'abatage, la préparation et l'emballage ont été effectués de manière à prévenir toute atteinte à la santé publique.		

Reverse.

Meat inspected for export according to the
 Belgian Royal Decree of 23 March 1901.

Vleesch goed verklaard voor den uitvoer
 krachtens het Belgisch Koninklijk Besluit
 van den 23^e Maart 1901

«RADUM»



V&H N-26

Verbal Description.

A slip of cardboard or of other suitable material containing the undermentioned particulars :—

Obverse.

The Royal Arms, the name of the Commune, the number of the slaughter-house, the signature of an authorized officer, and the words :—

ROYAUME DE BELGIQUE.

Viande pour l'exportation déclarée propre à la consommation conformément à l'Arrêté royal du 23 mars 1901 (1).

Date.....

L'Expert agréé par le Gouvernement :

Signature,

(1) Le porc n'est pas atteint de tuberculose. L'abatage, la préparation et l'emballage ont été effectués de manière à prévenir toute atteinte à la santé publique.

Reverse.

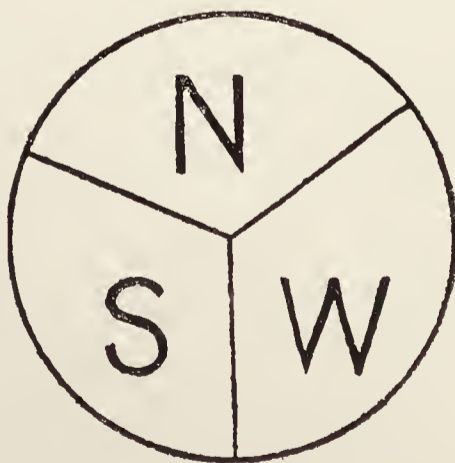
The words :—" Meat inspected for export according to the Belgian Royal Decree of 23 March, 1901."

" Vleesch goed verklaard voor den uitvoer krachtens het Belgisch Koninklijk Besluit van den 23 Maart, 1901."

STATE OF NEW SOUTH WALES.

A mark branded on the meat together with a label :—

1. The mark to be according to the subjoined representation or design and verbal description, that is to say :—

*Verbal Description.*

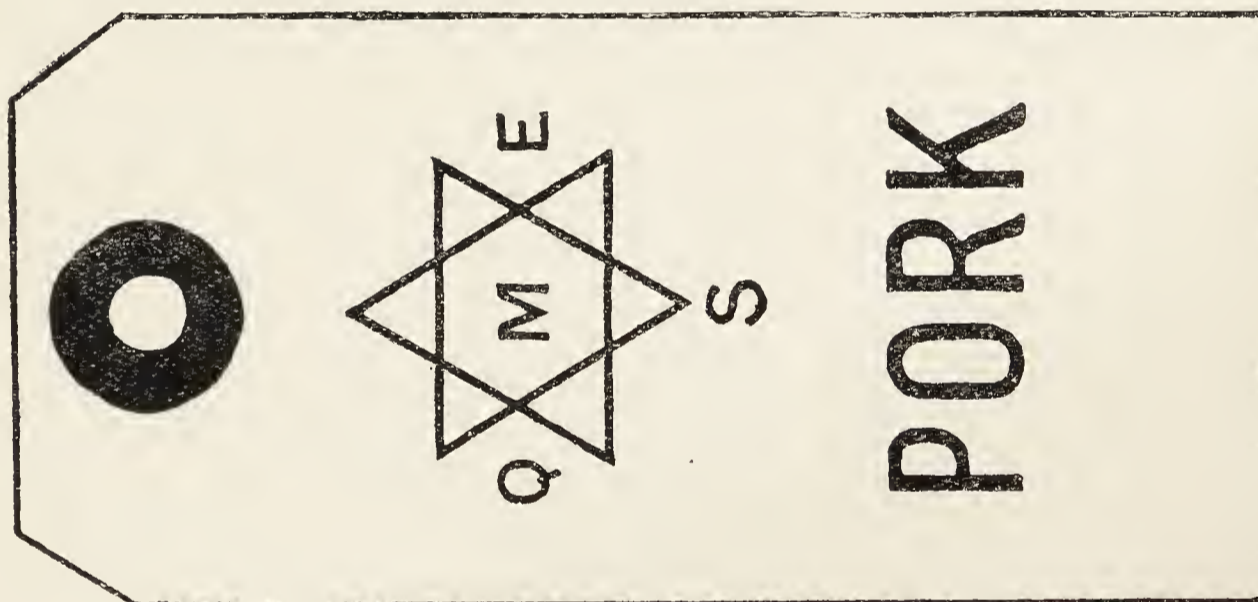
A device branded on the meat, and comprising within a circle the letters N.S.W., separated from each other by radial lines.

2. The label to be according to the subjoined representation or design and verbal description, that is to say :—

Obverse.



Reverse.



NOTE.—In the label represented in the above design the double triangle and letters Q. M. E. S. are the registered trade mark of an exporting firm and indicate the place of slaughter. Other designs with a similar significance may be substituted.

Verbal Description.

A slip of cardboard or of other suitable material containing the undermentioned particulars :—

Obverse.

On the right side of the label the words "Australia. State of New South Wales." Block signature of the Examining Officer under

Commerce Act, 1905. On the left side of the label a star enclosing a circle containing the words "Commonwealth of Australia. Approved for Export."

Reverse.

A registered trade mark indicating the exporting company and the place of slaughter, and the word "Pork."

STATE OF VICTORIA.

A label of suitable material and otherwise in accordance with the subjoined verbal description, that is to say :—

A printed form containing the undermentioned particulars :—

State of Victoria, abattoir of origin, name of the Inspecting Officer, and the words "Certified to be from animals free from disease and prepared and packed under Government Supervision."

The label to bear a stamp according to the subjoined representation or design and verbal description, that is to say :—

Representation of Design.



Verbal Description.

Within an oval frame, a crown between the letters "D" and "A," together with the words "State of Victoria."

Given under the Seal of Office of the Local Government Board, this Twenty-third day of September, in the year One thousand nine hundred and nine.



S. B. Provis,
Secretary.

John Burns,
President.

THE MIDWIVES ACT, 1902.

At the February meeting the Medical Officer of Health reported that on the 16th inst. he attended a conference at Ipswich on the Midwives question.

EAST SUFFOLK COUNTY COUNCIL.

COUNTY HALL,
IPSWICH,
8th February, 1909.

DEAR SIR,

MIDWIVES ACT, 1902.

As to training and supply of Midwives in the County.

I beg to inform you that a Meeting of the Representatives appointed to attend the Conference hereon will be held at the County Hall, Ipswich, on Tuesday, the 16th instant, at 12.15 p.m., to transact the following business, viz. :—

1. Confirm minutes of last meeting.
2. Consider and determine upon the following resolutions passed by the Special Committee appointed at the last meeting, viz. :—

“ Resolved to recommend the Conference :

1. That it is desirable to increase the number of District Nursing Associations in the County in connection with the Suffolk Nursing Association and other existing organisations.
 2. That for this purpose the Aldermen, County Councillors, District Councillors, Guardians and Medical men practising in the District be invited to form a temporary Committee, with power to add to their number, in order to take such steps as may seem advisable to form an Association.”
 3. Consider and determine upon Sub-Committee's Scheme for formation of Nursing Districts where none now exist.
 4. Consider and determine upon the following notice of motion by Mr. W. E. Long, viz. :—
- “ (a) As to the advisability of forming an Annual Fund, by inviting the authorities of Churches and Chapels to contribute their collections on ‘Nursing Sunday.’
- (b) The Committee to administer such a fund.”

Any other business.

I enclose copy of Mr. Long's "Basis of a Scheme" and copy of a pamphlet of the Suffolk Nursing Association as to the formation of Nursing Districts.

Yours faithfully,

A. TOWNSHEND COBBOLD,

Clerk of the County Council.

A. MARSHALL, Esq.

EAST SUFFOLK COUNTY COUNCIL.

COUNTY HALL,

IPSWICH,

13th October, 1909.

DEAR SIR,

MIDWIVES ACT, 1902.

As to the training and supply of Midwives in the County.

I beg to inform you that a further Conference hereon will be held at the County Hall, Ipswich, on Tuesday, the 26th instant, at 2.30 p.m., to transact the following business, viz. :—

1. To confirm the minutes of the last meeting.
2. To consider and determine upon the report of the Special Committee.
3. To receive a list of Nursing Districts suggested by Boards of Guardians, and to determine thereon.
4. To consider and determine upon replies received from the suggested conveners of Nursing Districts.
5. To consider and determine upon the report (if any) of a Conference of Representatives of Boards of Guardians as to a uniform basis of contribution by Guardians to Nursing Districts if pauper cases are undertaken.
6. To consider and determine upon the following notice of motion by Mr. W. E. Long, the consideration of which was adjourned at the last Conference, viz. :—

“ (a) As to the advisability of forming an Annual Fund by inviting the authorities of Churches and Chapels to contribute their collections on “Nursing Sunday.”

“ The Committee to administer such a fund.”

Any other business.

Yours faithfully,

A. TOWNSHEND COBBOLD,

Clerk of the East Suffolk County Council.

A. MARSHALL, Esq.

Port of Lowestoft.

Health Report for 1909.

The accompanying *Shipping Accounts* have been furnished by H.M. Collector of Customs :—

Inwards, from Foreign Parts—

		1908.		1909.	
		Vessels.	Tons.	Vessels.	Tons.
With cargoes, Steam	..	61	19136	52	16782
„ Sailing	..	101	7315	74	7886
In ballast, Steam	..	133	30897	126	28452
„ Sailing	..	260	13141	443	22173
Total		555	70489	695	75293

Inwards, Coasting—

With cargoes	.. ..	553	77048	569	76406
In ballast	.. ..	568	47920	524	49061
Total		1121	124968	1093	125467

The total tonnage of Inward Shipping during each of the past ten years was as follows :—

1900	..	..	..	..	120,468
1901	..	..	..	..	138,905
1902	..	..	..	..	150,717
1903	..	..	..	..	170,467
1904	..	..	..	..	169,493
1905	..	..	..	..	166,450
1906	..	..	..	..	184,533
1907	..	..	..	..	187,614
1908	..	..	..	..	195,457
1909	..	..	..	..	200,760

There were six deaths accredited to the port, and afterwards allocated to the various localities to which they belonged.

PORT DEATHS, 1909.

		Age.	Ward.	
Jan. 21	J.S.	56	Scotland	Found drowned in harbour.
July 26	J.C.	48	South	Drowned in harbour.
Aug. 6	C.P.	14	West	Drowned in sea.
Oct. 19	J.M.	34	Pakefield	Drowned in river, near bridge.
Nov. 16	B.U.	58	Kessingland	Drowned in Hamilton Dock.
Dec. 13	H.H.	69	Oulton	Drowned in Waveney Dock.

The number and nationality of ships entering the Port was as follows :—

British	..	..	..	..	717
French	..	..	..	..	9
Norwegian	..	..	..	..	70
Dutch	..	..	..	..	2
German	..	..	..	..	9
Swede	..	..	..	..	35
Belgian	..	..	..	..	8
Danish	..	..	..	..	2
Russian	..	..	..	..	7
					<hr/> 859

For the information of the Local Government Board the Sanitary Inspector reports as follows :—

During the year 1909, there have been into this Port 1,745 Canal Boats, 845 under the Merchant Shipping Act, 630 under the Canal Boats Act, and 270 registered under the Canal Boats Act.

There are 11 not properly marked. Four had orders to clean out the Water bottles and 19 to clean out their Cabins.

The boats not properly marked will have attention. Some of these boats really belong to Great Yarmouth, but will have attention during the year if they are not abolished.

The 1,745 Canal Boats do not mean that they are separate boats, as one boat may pass in and out of this Port fifty times in a year. All boats have special attention at inspection.

There were 280 inspected here, and the same boats may have been inspected on their return journey to Norwich or Great Yarmouth.

Four water bottles and 19 cabins required cleaning out ; these were principally in the Coal Carriers where it is almost impossible for the men to keep them clean.

CHOLERA.

Circular :

*Port Sanitary Authorities
and certain Riparian
Sanitary Authorities.*

Cholera.

LOCAL GOVERNMENT BOARD,

WHITEHALL, S.W.,

2nd September, 1909.

SIR,

I am directed by the Local Government Board to state that Cholera, which has been, and still is, epidemic in Northern Russia, particularly in the St. Petersburg district and at Archangel, Cronstadt, Riga and other Baltic ports, has now extended to Holland, and that several cases and deaths have already occurred at Rotterdam and in the vicinity.

The Sanitary Authorities of British ports trading with Rotterdam, or with North Russian ports, should be on their guard against the importation of Cholera into their districts by vessels coming from places where the disease has appeared or is likely to appear. In this connection it is essential that the Medical Officers of Health of such British ports should endeavour to keep themselves informed as to the spread of the present outbreak of Cholera, and especially as to the continuance of the disease in ports where it now exists and its appearance in other ports not yet known to be affected by it. The Statement which the Board issues weekly to the Medical Officers of Health of Port and Riparian Sanitary Authorities, and which contains information as to such Cholera occurrences as have come under the Board's notice, will be of assistance in this direction.

I am to remind you that on September 9th, 1907, the Board issued a revised General Order relating to Cholera, Yellow Fever, and Plague on ships arriving from foreign ports. The Board rely

on the Port and Riparian Sanitary Authorities taking all necessary steps under that Order to prevent the introduction of Cholera into this country.

The Board will be glad if you will supply the Medical Officer of Health with a copy of this Circular.

I am, Sir,

Your obedient Servant,

S. B. PROVIS.

Secretary.

To the Clerk to the Port Sanitary Authority, *or*
The Clerk to the Riparian Sanitary Authority.

BOROUGH OF LOWESTOFT.
URBAN AND PORT SANITARY AUTHORITY.

TOWN HALL,

LOWESTOFT.

3rd September, 1909.

G. MAIN SMITH, ESQ.,

H. M. Collector of Customs,

Lowestoft.

Dear Sir,

I have been instructed to ask you to order that all vessels coming from Rotterdam and vicinity, where Cholera is reported, shall have their bilges pumped out and water tanks emptied before entering the harbour. It would be as well to include vessels coming from Riga.

Yours truly,

A. MARSHALL.

CUSTOM HOUSE,

LOWESTOFT,

4th September, 1909.

SIR,

I beg to acknowledge receipt of your letter of yesterday's date requesting that vessels from Rotterdam and vicinity and from Riga, shall be ordered to have their bilges pumped out and water tanks emptied before entering the harbour.

Instructions have been issued accordingly.

Smacks often enter this port from Ymuiden and Scheveningen. Do you require any special steps to be taken with regard to these vessels ?

I am,

Yours obediently,

B. G. LEMON,

Acting Collector.

The Medical Officer of Health,
Lowestoft.

BOROUGH OF LOWESTOFT.
URBAN AND PORT SANITARY AUTHORITY.

TOWN HALL,

LOWESTOFT.

6th September, 1909.

B. G. LEMON ESQ.

Acting Collector of Customs,
Lowestoft.

Dear Sir,

Many thanks for your letter of the 4th inst. Please carry out your regulations with regard to Ymuiden and Scheveningen the same as for Rotterdam and the Baltic Ports.

Yours truly,

A. MARSHALL.

Notice issued to Skippers:—

PORT SANITARY AUTHORITY OF LOWESTOFT.

In view of the prevalence of Cholera in various Dutch Ports, it is necessary that precautions should be taken to prevent its introduction into this Country.

With this object, Masters of Fishing Vessels calling at Dutch Ports, are requested to EMPTY THEIR WATER TANKS and PUMP OUT THEIR BILGES before entering the Piers.

A. MARSHALL, D.P.H.

*Medical Officer of Health,
Lowestoft.*

TOWN HALL,

LOWESTOFT.

11th Sept., 1909.

Reproduced from "The British Medical Journal," 11th September, 1909.

CHOLERA IN HOLLAND.

The sanitary authorities in Holland seem to have got the outbreak of cholera which occurred there at the end of August well in hand. Most of the cases have occurred in the port of Rotterdam, but a few real cases, and a few others of a suspicious character, have been notified at Amsterdam, Breda, Utrecht, Gorinchem, Vlaardingen, Tolen, and Hoogvliet. The Local Government Board in England has issued a circular to port sanitary authorities and certain riparian sanitary authorities calling attention to the fact that the epidemic of cholera in northern Russia, particularly in the St. Petersburg district and at Archangel, Cronstadt, Riga and other Baltic ports, has extended to Holland, and requesting the sanitary authorities of British ports trading with Rotterdam or north Russian ports to be on their guard against the importation of cholera into their districts. The Board refers to the revised general order relating to cholera, yellow fever, and plague on ships arriving from foreign ports issued on September 9th, 1907, and points out that the statement which the Board issues weekly to medical officers of health of port and riparian sanitary authorities contains information as to such cholera occurrences as come under its notice. In Russia the disease appears to be claiming about 25 victims daily; the total, so far, for this year is nearly 6,000. Preventive inoculation has been applied to over 53,000 persons, and of these only 12 contracted the disease and only 4 died. In St. Petersburg the continuance of the disease is attributed to the inefficient filtration of drinking water, and the city council has resolved to construct additional filters. In Holland the cases which have occurred number over 20, with 14 deaths, and are attributed to the drinking of unfiltered river water.

JOINT SMALL POX AND QUARANTINE HOSPITAL.

At the March meeting the Sanitary Committee recommended to the Joint Small Pox Hospital Committee, that the Medical Officer of Health for the Borough shall act in all cases which may come from the Borough or Port and are removed to the Hospital.

Annual Report of the Medical Officer of Health for the year 1909, for the Borough of Lowestoft, on the administration of the Factory and Workshop Act, 1901, in connection with

FACTORIES, WORKSHOPS, WORKPLACES AND HOMEWORK.

1. Inspections.

Including Inspections made by Sanitary Inspectors or Inspectors of Nuisances.

Premises.	Number of		
	Inspections.	Written Notices.	Prosecutions.
Factories (Including Factory Laundries).	280	...	...
Workshops (Including Workshop Laundries).	408	...	...
Workplaces (Other than Outworkers' premises included in Part 3 of this Report).	956	...	...
Total	1644	...	...

2. Defects Found.

Particulars.	Number of Defects.			Number of Prosecutions.
	Found.	Remedied.	Referred to H.M. Inspector.	
<i>Nuisances under the Public Health Acts :—*</i>				
Want of cleanliness .. .. .	...	...	..	...
Want of ventilation ... .. .	...	...	...	...
Overcrowding ... .. .	...	...	...	...
Want of drainage of floors ... .. .	...	...	...	...
Other nuisances ... .. .	...	...	...	...
†Sanitary accommodation {	Insufficient	3	3	...
	Unsuitable or defective ..	...	...	...
	Not separate for sexes ...	...	...	...
<i>Offences under the Factory and Workshop Act :—</i>				
Illegal occupation of Underground Bakehouse (s. 101). ... .. .	...	...	...	..
Breach of special sanitary requirements for bakehouses (ss. 97 to 100). ... .. .	...	2	...	...
Other offences (Excluding offences relating to Outwork which are included in Part 3 of this Report)	2	2	...	...
Total	5	5	..	...

*Including those specified in sections 2, 3, 7 and 8, of the Factory and Workshop Act as remediable under the Public Health Acts.

†For districts not in London, state here whether section 22 of the Public Health Acts Amendment Act, 1890, has been adopted by the District Council; and if so what standard of sufficiency and suitability of sanitary accommodation for persons employed in factories and workshops has been enforced.

3.—Home Work.

NATURE OF WORK.	OUTWORKERS' LISTS, Sec. 107.													OUTWORK IN UNWHOLESOME PREMISES, s. 108.			OUTWORK IN INFECTED PREMISES, ss. 109, 110.		
	Lists received from Employers.						Addresses of Outworkers &		Prosecutions.		Inspections of Outworkers' premises.	In- stances.	In- stances.	Orders made (S. 110).	Prosecu- tions (S. 109, 110).				
	Sending twice in the year			Sending once in the year			Rec'd from other Co'ncls (8)	Forw'd to other Co'ncls (9)	Notices served on Occupiers as to keeping lists. (10)	Fail'g to keep or permit insp'ctn of lists. (11)						Fail'g to send lists. (12)			
	Lists.† (2)	Outworkers †		Lists. (5)	Outworkers.														
		Con- tractors. (3)	Work- men. (4)		Con- tractors (6)	Work- men. (7)													
Wearing Apparel— (1) making, &c. ... (2) cleaning and washing Lace, lace curtains and nets Artificial flowers ... Nets, other than wire nets Tents ... Sacks ... Furniture and Upholstery Fur pulling ... Feather sorting ... Umbrellas, &c. ... Carding, &c., of buttons, &c. ... Paper bags and boxes Basket making ... Brush making ... Racquet and tennis balls Stuffed toys ... File making ... Electro-plate ... Cables and chains ... Anchors and grapnels Cart gear ... Locks, latches and keys Pea picking ... TOTAL 																		

* If an occupier gives out work of more than one of the classes specified in column 1, and subdivides his list in such a way as to show the number of workers in each class of work, the list should be included among those in column 2 (or 5 as the case may be) against the principal class *only*, but the outworkers should be assigned in columns 3 and 4 (or 6 and 7) into their respective classes. A footnote should be added to show that this has been done.

† The figures required in columns 2, 3, and 4, are the *total* number of the lists received from those employers who comply strictly with the statutory duty of sending *true* lists each year and of the entries of names of outworkers in those lists. The entries in column 2 must necessarily be *true* numbers, as there will be two lists for each employer—in some previous returns odd numbers have been inserted. The figures in columns 3 and 4 will usually be (approximately) double of the number of individual outworkers whose names are given, since in the February and August lists of the same employer the same outworker's name will often be repeated.

§ In view of the wide discrepancies found to exist between the totals in the two columns when the returns are added together, it is desired that care may be taken to give exact figures. Only those addresses should be counted which have actually been received from or forwarded to other Councils during the year covered by the report.

4.—Registered Workshops.

Workshops on the Register (s. 131) at the end of the year.						Nmber.
1.						2
Important classes of Workshops, such as workshop Bakehouses, may be enumerated here.	Factories	...	...	..	...	70
	Workshops	...	...	...	...	239
	Workshops (Fish Curing, Kipperirg, &c.)	...	...	..	...	102
	Total number of Workshops on Register					...	411

5.—Other Matters.

Class.					Number.			
I					2			
Matters notified to H.M. Inspector of Factories :—								
Failnre to affix Abstract of the Factory and Workshop Aet (s 133)					...			
Action taken in matters referred by H.M. Inspector as remediable under the Public Health Acts, but not under the Factory and Workshop Act (s. 5)					Notified by H.M. Inspector ...			35
					Reports (of action taken) sent to H.M. Inspector			
Other
Underground Bakehouses (s. 101) :—								
Certificates granted during the year				
In use at the end of the year			I

Date

1910.

(Signature) A. MARSHALL,

Medical Officer of Health.

NOTE.—The Factory and Workshop Act, 1901 (s. 132), requires the Medical Officer of Health in his Annual Report to the District Council to report specifically on the administration of that Act in workshops and workplaces, and to send a copy of his Annual Report, or so much of it as deals with this subject, to the Secretary of State (Home Office). If the Annual Report is presented otherwise than in print, it is unnecessary to include in the copy sent to the Home Office the portions which do not relate to 'factories, workshops, workplaces or homework. The duties of Local Authorities and the Medical Officer of Health under the Act of 1901 are detailed in the Home Office Memorandum of December, 1904. A further Memorandum, on the Homework Provisions of the Factory Act, was issued to all District Councils and Medical Officers of Health in October, 1906.

TABLE I.

Vital Statistics of Whole District during 1909 and Previous Years.

Name of District—BOROUGH AND PORT OF LOWESTOFT.

Year.	Population estimated to Middle of each Year.	BIRTHS.		Total Deaths Registered in the District.					Deaths of Non- residents registered in Public Institutions in the District.	Deaths of Residents registered in Public Institutions beyond the District.	Nett Deaths at all ages belonging to the District	
		Number.	Rate.*	Under 1 year of age.		At all ages.					Number.	Rate.*
				Number.	Rate per 1,000 births registered.	Number.	Rate.*					
I	2	3	4	5	6	7	8	9	10	11	12	13
1899	26453	858	30.0	121	141	376	13.1	22	10	11	377	13.1
1900	26884	857	29.2	118	137	438	14.9	29	7	10	441	15.0
1901	30026	954	31.7	165	170	444	14.7	28	10	25	459	15.2
1902	30771	959	31.1	118	123	417	13.5	29	8	32	441	14.3
1903	31536	967	30.6	132	136	412	13.0	36	14	34	432	14.0
1904	32320	966	29.8	138	142	430	13.3	30	5	38	463	14.3
1905	33123	934	28.2	105	112	394	11.8	40	17	22	399	12.0
1906	33946	979	28.8	126	128	453	13.3	42	13	35	475	13.9
1907	34790	927	26.6	113	121	424	12.1	56	11	28	441	12.6
1908	35655	1035	29.0	115	112	420	11.7	60	12	30	438	12.2
Averages for years 1899-1908.	31550	943	29.5	125	132	420	13.0	37	10	26	436	13.6
1909	36542	985	26.9	97	98	396	10.8	27	4	33	425	11.6

* Rates in Columns 4, 8, and 13 calculated per 1,000 of estimated population.

NOTE.—The deaths to be included in Column 7 of this table are the whole of those registered during the year as having actually occurred within the district or division. The deaths to be included in Column 12 are the number in Column 7, corrected by the subtraction of the number in Column 10 and the addition of the number in Column 11.

By the term "Non-residents" is meant persons brought into the district on account of sickness or infirmity, and dying in public institutions there; and by the term "Residents" is meant persons who have been taken out of the district on account of sickness or infirmity, and have died in public institutions elsewhere.

The "Public Institutions" to be taken into account for the purpose of these Tables are those into which persons are habitually received on account of sickness or infirmity, such as hospitals, workhouses and lunatic asylums. A list of the Institutions in respect of the deaths in which corrections have been made should be given on the back of this Table.

Area of District in acres (exclusive of area covered by water)	}	2,178	
<hr/>			
Total population at all ages ..	29,850	}	At Census of 1901.
Number of inhabited houses ..	6,065		
Average number of persons per house	4.9		

I. Institutions within the District receiving sick and infirm persons from outside the District.	II. Institutions outside the District receiving sick and infirm persons from the District.	III. Other Institutions, the deaths in which have been distribu- ted among the several localities in the District.
General Hospital. Convalescent Home. Isolation Hospital. Medical Home. District Nursing Home.	Oulton Workhouse. Small Pox and Quarantine Hospital.	General Hospital. Isolation Hospital. Convalescent Home.

Is the Union Workhouse within the District?—No.

Vital Statistics of Separate Localities in 1909 and previous years.

Name of District—BOROUGH AND PORT OF LOWESTOFT.

Names of Localities.	1—For WHOLE DISTRICT.				2—NORTH WARD.				3—SOUTH WARD.				4—EAST WARD.				5—WEST WARD.			
	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.
YEAR.	a	b	c	d	a	b	c	d	a	b	c	d	a	b	c	d	a	b	c	d
1899	26453	858	377	121	7500	252	103	34	6270	188	94	28	5250	157	78	18	7433	261	102	41
1900	26884	857	441	118	7600	268	137	37	6500	175	93	17	5330	162	102	24	7454	252	109	40
1901	30026	954	459	165	8503	322	153	59	7468	198	96	30	5854	160	102	36	8201	274	108	40
1902	30771	959	441	118	8725	287	147	46	7649	205	117	22	5994	185	83	19	8403	282	94	31
1903	31536	969	432	132	8844	311	137	42	7922	185	112	24	6032	146	75	26	8738	327	108	40
1904	32320	966	463	138	9067	282	155	42	8142	220	91	25	6103	157	86	24	9008	307	131	47
1905	33123	934	399	105	9361	293	94	27	8308	201	98	19	6152	140	91	22	9302	300	116	37
1906	33946	979	475	126	9664	304	151	53	8526	224	106	13	6229	152	94	23	9527	299	124	37
1907	34790	927	441	113	9934	283	115	33	8694	201	120	20	6388	166	75	22	9774	277	131	38
1908	35655	1035	438	115	10152	287	144	33	8951	282	94	23	6508	150	80	17	10044	316	120	42
Averages of Years 1899-1908	31550	943	436	125	8935	289	133	40	7843	207	102	22	5984	157	86	23	8788	289	114	39
1909	36542	985	425	97	10407	300	138	37	9147	227	113	17	6648	157	77	13	10340	301	97	30

NOTES.—(a) The separate localities adopted for this table should be areas of which the populations are obtainable from the census returns, such as wards, parishes, or groups of parishes or registration sub-districts. Block 1 may, if desired, be used for the whole district: and blocks 2, 3, etc., for the several localities. In small districts without recognized divisions of known population this Table need not be filled up.

(b) Deaths of residents occurring in public institutions beyond the district are to be included in sub-columns *c* of this Table, and those of non-residents registered in public institutions in the district excluded. (See note on Table I. as to meaning of terms, "resident" and "non-resident.")

(c) Deaths of residents occurring in public institutions, whether within or without the district, are to be allotted to the respective localities according to the addresses of the deceased.

(d) Care should be taken that the gross totals of the several columns in this Table respectively equal the corresponding totals for the whole districts in Tables I. and IV.: thus, the totals of sub-columns *a*, *b* and *c*, should agree with the figures for the year in the columns 2, 3 and 12, respectively, of Table I.: the gross total of the sub-columns *c* should agree with the total of Column 2 in Table IV., and the gross total of sub-columns *d* with the total of column 3 in Table IV.

Cases of Infectious Disease notified during the year 1909.

Name of District--BOROUGH AND PORT OF LOWESTOFT.

CASES NOTIFIED IN WHOLE DISTRICT.																	
NOTIFIABLE DISEASE.	At Ages 1--Years.																
	At all Ages.	Under 1	1 to 5	5 to 15	15 to 25	25 to 65	65 and upwards	Total Cases Notified in each locality.					** No. of Cases removed to Hospital from each locality.				
								1 North Ward	2 South Ward	3 East Ward	4 West Ward (H)	1 North Ward	2 South Ward	3 East Ward	4 West Ward	Total Cases removed to Hospital.	
Small-pox ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cholera ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diphtheria (including Membranous croup)	38	..	9	18	8	3	..	9	17	7	5	5	7	6	4	25	
Erysipelas..	31	1	2	..	1	17	10	13	6	5	7	46	..	..	..	..
Scarlet fever	116	2	28	68	11	7	..	20	35	15	46	16	22	13	39	90	
Typhus fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Enteric fever	6	..	..	..	2	4	..	1	1	1	3	1	..	1	3	5
Relapsing fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Continued fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Puerperal fever	1	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..
Plague ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pulmonary	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tuberculosis	15	..	1	4	1	9	..	8	..	3	4	..	..	..	..	..
Totals ..	207	3	40	90	23	41	10	52	59	31	65	24	30	20	46	120	

NOTES.—The localities adopted for this table should be the same as those in Tables II. and IV. State in space below the name of the isolation hospital, if any, to which residents in the district, suffering from infectious disease, are usually sent, and the accommodation, available for the district, afforded by it. Mark (H) the locality in which it is situated or if not within the district, state where it is situated, and in what district. The name of the authority by whom the hospital is provided should also be given. Mark (W) the locality in which a workhouse is situated.

* This space may be used for record of other disease the notification (compulsory or voluntary) of which is in force in the district.

† These age columns for notifications should be filled up in all cases where the Medical Officer of Health, by inquiry or otherwise has obtained the necessary information.

 Column 8 should be filled up with the Totals of cases removed to Hospital, whether the District is divided into separate localities or is treated as one undivided area.

Borough Isolation Hospital : SANATORIUM, ROTTERDAM ROAD.

Small Pox and Quarantine Hospital: CARLTON COLVILLE.

Total available beds	22	Number of Diseases that can	$\left\{ \begin{matrix} 3 \\ 2 \end{matrix} \right\}$
	4	be concurrently treated	

TABLE IV.

Causes of, and Ages at, Death during Year 1909.

Name of District: BOROUGH AND PORT OF LOWESTOFT.

(SEE NOTES AT BACK).

CAUSES OF DEATH. 1.	Deaths at the subjoined ages of "Residents," whether occurring in or beyond the District.							Deaths at all Ages of "Residents" belonging to localities, whether occurring in or beyond the District.				Total Deaths whether of "Residents" or "Non- Residents" in Public Institutions in the District.
	All Ages. 2.	Under 1 year. 3.	1 and under 5. 4.	5 and under 15. 5.	15 and under 25. 6.	25 and under 65. 7.	65 and upwards. 8.	North Ward 9.	South Ward 10.	East Ward 11.	West Ward 12.	
Small-pox .. ..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	13	3	9	1	..	..	..	5	2	1	5	..
Scarlet Fever	2	..	..	1	..	1	..	1	1	..	..	..
Whooping-cough ..	7	4	3	..	..	..	..	5	1	..	1	..
Diphtheria (including Membraneous croup)	4	..	1	3	..	..	..	..	3	1	..	2
Croup .. ..	..	..	..	..	..	..	..	..	..	..	..	..
Fever { Typhus .. ..	..	..	..	..	..	..	..	..	..	..	..	..
{ Enteric	2	..	..	..	1	1	..	..	1	..	1	1
{ Other continued	..	..	..	..	..	..	..	..	..	..	..	..
Epidemic influenza ..	8	1	..	..	1	..	6	3	3	1	1	..
Cholera .. ..	..	..	..	..	..	..	..	..	..	..	..	..
Plague .. ..	..	..	..	..	..	..	..	..	..	..	..	..
Diarrhœa (<i>See notes at back</i>)	5	5	..	..	..	..	..	1	1	1	2	..
Enteritis (<i>See notes at back</i>)	6	4	1	..	..	..	1	2	..	2	2	1
Gastritis (<i>See notes at back</i>) .. ..	..	..	..	..	..	..	..	..	..	..	..	..
Puerperal fever (<i>See notes at back</i>) .. ..	..	..	..	..	..	..	..	..	..	..	..	..
Erysipelas .. ..	..	..	..	..	..	..	..	..	..	..	..	..
Phthisis (Pulmonary Tuberculosis) ..	28	..	..	3	6	19	..	8	10	2	8	..
Other tuberculous diseases	8	2	..	4	1	1	..	..	3	2	3	1
Cancer, malignant disease (<i>See notes at back</i>)	33	..	..	..	..	19	14	10	8	6	9	1
Bronchitis	18	5	2	..	..	2	9	5	7	2	4	1
Pneumonia	30	6	9	..	1	7	7	15	5	4	6	2
Pleurisy .. ..	..	..	..	..	..	..	..	..	..	..	..	1
Other diseases of Respiratory organs	4	1	..	..	1	1	1	1	1	1	1	1
Alcoholism } ..	5	..	..	..	..	3	2	3	..	1	1	..
Cirrhosis of liver }	..	..	..	..	..	..	..	..	..	..	..	..
Venereal diseases ..	3	3	..	..	..	..	..	2	..	1	..	..
Premature birth ..	19	19	..	..	..	..	..	10	3	2	4	..
Diseases and accidents of parturition	1	..	..	..	..	1	..	1	..	..	..	..
Heart diseases	51	..	..	..	1	24	26	8	23	8	12	1
Accidents	17	3	2	3	..	6	3	4	5	4	4	5
Suicides	6	..	..	..	..	6	..	3	2	1	..	..
Other septic diseases ..	16	..	2	2	1	7	4	3	3	5	5	8
All other causes ..	139	41	6	2	1	24	65	48	31	32	28	2
All causes	425	97	35	19	14	122	138	138	113	77	97	27

NOTES TO TABLES IV. AND V.

- (a) In Table IV., all deaths of "Residents" occurring in public institutions, whether within or without the district, are to be *included* with the other deaths in the columns for the several age groups (columns 2-8). They are also, in columns 9-15, to be *included* among the deaths in their respective "Localities" according to the previous addresses of the deceased as given by the Registrars. Deaths of "Non-residents" occurring in public institutions in the district are in like manner to be *excluded* from columns 2-8 and 9-15 of Table IV.
- (b) See notes on Table I. as to the meaning of "Residents" and "Non-residents," and as to the "Public Institutions" to be taken into account for the purposes of these Tables. The "Localities" in Table IV. should be the same as those in Tables II. and III.
- (c) All deaths occurring in public institutions situated within the district, whether of "Residents" or of "Non-residents," are, in addition to being dealt with as in note (a), to be entered in the last column of Table IV. The total number in this column should equal the figures for the year in column 9, Table I.
- (d) The total deaths in the several "Localities" in columns 9-15 of Table IV. should equal those for the year in the same localities in Table II., sub-columns c. The total deaths at all ages in column 2 of Table IV. should equal the gross total of columns 9-15, and the figures for the year in column 12 of Table I.
- (e) Under the heading of "Diarrhœa" are to be included deaths registered as due to Epidemic diarrhœa, Epidemic enteritis, Infective enteritis, Zymotic enteritis, Summer diarrhœa, Dysentery and Dysenteric diarrhœa, Choleraic diarrhœa, Cholera (other than Asiatic or epidemic), and Cholera Nostras. Deaths from diarrhœa secondary to some other well-defined disease should be included under the latter.
- Deaths from Enteritis, Muco-Enteritis, Gastro-Enteritis, and Gastritis (see under the heading Diarrhœal Diseases in Table V.) in Tables IV. and V. should be placed immediately below, but separately from, those enumerated under the heading Diarrhœa as defined by enumeration above. This is particularly important for deaths under one year of age, as many of the deaths in infancy returned as due to Enteritis are really caused by Epidemic Diarrhœa. In the course of years, by the adoption of this recommendation, it will be practicable to ascertain the probable amount of transfer between these different headings.
- (f) Under the headings of "Cancer" and "Puerperal fever" should be included all registered deaths from causes comprised within these general terms. Thus: Under "Cancer" should be included deaths from Cancer, Carcinoma, Malignant disease, Scirrhous, Epithelioma, Sarcoma, Villous tumour, and Papilloma of bladder, Rodent ulcer. Under "Puerperal Fever" are to be included deaths from Pyæmia, Septicæmia, Sapræmia, Pelvic peritonitis, Peri- and Endo-Metritis occurring in the Puerperium.
- (g) Under "Congenital Defects" in Table V. are to be included deaths from Atelectasis, Icterus neonatorum, Navel hæmorrhage, Malformations and Congenital hydrocephalus.
- (h) Under "Tuberculous Meningitis" are to be included deaths from Acute hydrocephalus.
- (i) Under "Other Tuberculous Diseases" are to be included deaths from Tuberculosis, Tuberculosis of bones, joints and other organs, Lupus and Scrofula.
- (j) All deaths certified by registered Medical Practitioners and all Inquest cases are to be classed as "Certified"; all other deaths are to be regarded as "Uncertified."

In recording the facts under the various headings of Tables I., II., III., IV. and V., attention has been given to the notes on the Tables.

A. MARSHALL, D.P.H.,
Medical Officer of Health.

TABLE V.

BOROUGH AND PORT OF LOWESTOFT.

Infantile Mortality during the year 1909.

Deaths from stated Causes in Weeks and Months under One Year of Age.

(See Notes at back of Table IV.)

CAUSE OF DEATH.	Under 1 Week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 1 Month.	1-2 Months.	2-3 Months.	3-4 Months.	4-5 Months.	5-6 Months.	6-7 Months.	7-8 Months.	8-9 Months.	9-10 Months.	10-11 Months.	11-12 Months.	Total Deaths under 1 Year.
All Causes—																	
Certified	26	7	3	2	38	10	5	5	6	12	3	5	3	3	4	1	95
Uncertified	2	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	2
1. Common Infectious Diseases—																	
Small-pox .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chicken-pox .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles .. ..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	1	..	3
Scarlet Fever.. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diphtheria (including Membranous Croup	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping Cough ..	..	..	..	..	..	..	..	1	..	..	..	2	..	..	..	1	4
2.*Diarrhœal Diseases—																	
Diarrhœa, all forms	..	..	..	..	..	1	2	..	..	1	1	..	..	..	..	..	5
Enteritis, Muco-enteritis, Gastro-enteritis .. ..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1
Gastritis, Gastro-intestinal Catarrh..	..	..	..	1	1	..	..	..	..	..	..	..	..	1	..	..	2
3. Wasting Diseases—																	
Premature Birth ..	10	4	1	..	15	2	1	..	1	..	..	..	..	..	..	..	19
*Congenital Defects ..	3	..	..	..	3	2	..	..	..	..	..	..	..	..	..	..	5
Injury at Birth ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Want of Breast milk, Starvation .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Atrophy, Debility, Marasmus .. ..	..	..	1	..	1	1	1	1	3	4	1	..	1	1	2	..	16
4. Tuberculous Diseases—																	
*Tuberculous Meningitis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tuberculous Peritonitis: Tabes Mesenterica ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
*Other Tuberculous Diseases .. ..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	2
5. Other Causes—																	
Erysipelas .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Syphilis .. ..	..	1	..	..	1	..	..	..	..	2	..	..	..	..	..	..	3
Rickets .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Meningitis (not Tuberculous) ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Convulsions	2	..	..	..	2	..	..	..	..	3	..	..	..	..	..	..	5
Bronchitis .. ..	..	..	..	..	..	2	..	1	..	1	..	..	..	..	1	..	5
Laryngitis .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pneumonia .. ..	..	..	..	..	..	1	..	..	2	..	..	2	1	..	..	..	6
Suffocation, overlying	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	2
Other Causes	13	2	1	1	17	1	..	1	..	..	..	..	..	..	..	..	19
	28	7	3	2	40	10	5	5	6	12	3	5	3	3	4	1	97

District (or sub-division) of Lowestoft.

Population (estimated to middle of 1909), 36,542.

Births in the year { Legitimate 954. Deaths in the year of { Legitimate infants 95.
 { Illegitimate 31. { Illegitimate infants 2.

Deaths from all Causes at all Ages 425.

* See Notes to Table IV.

TABLE VI.

Cases of Infectious Diseases Notified since 1890.

	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909
Small Pox	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..
Scarlet Fever	3	8	32	87	56	19	55	157	53	161	124	243	266	102	25	33	101	82	176	116
Diphtheria	10	5	62	112	65	46	46	29	15	21	82	85	73	49	44	47	37	11	32	38
Typhoid Fever	64	30	21	63	31	41	36	44	46	43	13	11	19	12	19	16	17	34	77	6
Puerperal Fever	5	4	5	2	4	2	4	1	3	1	..	1	1	4	1	4	2	2	2	1
Erysipelas..	27	17	14	27	15	16	17	17	14	21	21	18	27	21	14	15	21	20	29	31
Measles	..	..	..	..	..	..	24	8	83	725	441	347	72	210	799	120	*..	..	..	..
Chicken Pox	..	..	..	..	..	..	..	..	..	..	..	..	..	35	110	65	47	*..	..	..
Phthisis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	†15

* Not notifiable.

† Notifiable in Poor Persons from 1st January, 1909.

TABLE VII.

Birth=rate, Death=rate, and Analysis of Mortality during the year 1909.

Annual Rate per 1,000 living.

Cols.	Birth- rate. 1	Death-rate.		Principal Epidemic Diseases Cols. 5-11.	Small- pox. 5	Measles 6	Scarlet Fever. 7	Diph- theria. 8	Whoop- ing Cough. 9	Fever. 10	Diar- rhœa. 11	Deaths under 1 year per 1000 Births. 12
		Crude. 2	Cor- rected. 3									
England and Wales	25·6	14·5	14·5	1·12	0·00	0·35	0·09	0·14	0·20	0·06	0·28	109
76 Great Towns ..	25·7	14·7	15·6	1·42	0·00	0·48	0·11	0·15	0·24	0·06	0·38	118
143 Smaller Towns ..	24·8	13·9	14·5	1·08	0·00	0·33	0·09	0·16	0·17	0·06	0·27	111
England and Wales, less the 219 Towns ..	25·6	14·5	13·6	0·80	0·00	0·21	0·06	0·14	0·16	0·06	0·17	98
Lowestoft	26·9	10·8	11·6	0·87	0·00	0·35	0·05	0·10	0·19	00·5	0·13	98

TABLE VIII.
Return to Dr. A. MARSHALL, Medical Officer of Health, of Number
of Houses, &c. in the Borough.*
BOROUGH OF LOWESTOFT.

Name of Ward.	Number of Houses, &c.	Number of Cottages £7 10s. and under.	Total.	Inhabited.	Uninhabited.	Total.
NORTH ..	1187	1152	2339	2287	52	2339
SOUTH ..	1713	754	2467	2346	121	2467
EAST ..	1058	589	1647	1549	98	1647
WEST ..	1379	912	2291	2224	67	2291
	5337	3407	8744	8406	338	8744

January, 1910.

F. GAGE, *Rate Collector.*
Town Hall, Lowestoft.

*This Table includes, in addition to domestic buildings, all separate buildings which are liable to be inhabited for purposes of trade or business or occasional meeting.

TABLE IX.

LOWESTOFT WATER AND GAS COMPANY.

Return of Houses in Lowestoft and Kirkley Supplied with Company's Water for Domestic Purposes. Number of W.C.s and Baths.
Year Ending 25th December, 1909.

Total No. of Houses supplied.	Houses with 1 W.C.	Houses with 2 W.C.s.	Houses with 3 W.C.s.	Houses with 4 W.C.s.	Houses with 5 W.C.s.	Houses with 6 W.C.s.	Houses with 7 W.C.s.	Houses with 8 W.C.s.	Total No. of Houses without W.C.s.	Houses with 1 Bath.	Houses with 2 Baths.	Houses with 3 Baths.	Total No. of Houses with Baths.
1	2	3	4	5	6	7	8	9	10	11	12	13	14
7527	5538	1392	133	18	3	—	1	7085	442	813	4	1	818

LOWESTOFT,

25th February, 1910.

For the Lowestoft Water and Gas Company,

JOSEPH HAWKSLEY,

Manager.



Borough of Lowestoft
Education Committee.

THE
ANNUAL REPORT
OF THE
School Medical Officer.

1909.

TOWN HALL,
LOWESTOFT.

To the Chairman and Members of the Education Committee.

GENTLEMEN,

I have much pleasure in presenting my Second Annual Report made out on the lines laid down by the Board of Education.

The work is exceedingly heavy, and the report replete with technicalities.

The standard height and weight of British children, at various ages, are those collected by the Anthropometrical Committee of the British Association.

A branch division of the Invalid Children's Aid Association of the East Suffolk County Council has been formed under the presidency of Miss B. M. C. Doughty.

I am indebted to DR. D. W. BOSWELL for his assistance in carrying out the Medical Inspections, and to the teachers for their co-operation in organisation and clerical assistance.

I am, Gentlemen,

Your obedient servant,

A. MARSHALL, M.D., D.P.H.,
School Medical Officer.

INSPECTION ORGANISATION.

In accordance with Circular 596, 17th August, 1908 (Section 6, Sub-section B), the Medical Officer of Health received the appointment of Inspector of School Children, or what is now termed School Medical Officer (S.M.O.), thereby placing the jurisdiction of Schools, from a Medical point of view under one head, the advantage of which must be, to every one connected with public or School life, so obvious as to hardly need calling attention thereto.

6b. 1. The Board's Schedule of Medical Inspection has been followed in its entirety.

The loose leaf ledger system of filing records has been adopted by the Committee, by which system each individual examination is made on a loose leaf, and after being carefully copied is transferred to the ledger in alphabetical order, and forms the official register left in charge of the head teacher of each individual school. The copy is sent on to the Central Office of the S.M.O. and locked in another binder which is used for statistical and report purposes.

2. The assistance given the S.M.O.

The Deputy attended with the S.M.O. at almost all of the Inspections made. The Head Teacher of each school organised the Inspection after consultation with the S.M.O., and in every instance supervised the supply of children coming up and leaving the doctors' tables, and in nearly every case supplied a separate teacher to do the clerical work at each Medical Officer's table, thereby facilitating the examination of the children and speeding up the work of the doctors, enabling them to direct almost the whole of their attention to the highly technical work of Medical Examination without having to handle a pen except at the end of the afternoon to sign each individual report of the day's examination.

The assistance given by the Managers was done in such a way as to make itself apparent in the smooth way every one fell into line. I have had no occasion to call in the services of a Nurse at the School at present, but I have full permission from the Authority to enlist the services of the District Nurses' Association whenever required.

I have always received, and continue to receive, every assistance from the Chief Attendance Officer and his Assistant,

3. Presence of Parents.

One anticipated on commencing this work that there would be considerable opposition on the part of the parents to have their children inspected. This idea proved to be entirely erroneous. A carefully worded circular letter, a copy of which here follows :—

LOWESTOFT EDUCATION COMMITTEE.

.....School.

.....19

DEAR SIR (OR MADAM),

The Education (Administrative Provisions) Act of 1907 requires that all children attending elementary schools shall be medically inspected, and I therefore have to inform you that your Child.....will be Medically Examined at School to-morrow (.....day) at about.....o'clock in the Afternoon.

The Examination will take place in a room set apart for the purpose and will be quite private.

It is very desirable that you should be present, and the Committee hopes that you will make a special effort to attend.

Yours faithfully,

.....

Head Teacher.

was dispatched by the Head Teacher to the mother of each child to be examined, stating the approximate time that the examination would take place and only a certain number were requested to attend at stated intervals. This lessened the time that the parent was kept waiting and avoided a crowd in waiting with its consequent noise, confusion, and annoyance. The mothers, in nearly every instance, attended with their children, assisted by loosening the clothing, overcoming any fear on the part of the children, openly expressing their satisfaction and apparently regarding the procedure as a

consultation with a doctor free of charge. Where it was impossible for a parent to attend owing to illness or having to go to work, notes were almost invariably sent consenting to the inspection, giving particulars as to previous infectious disease, personal and family history.

Co-operation and subsequent treatment of defects.

There has been no difficulty under this head. The great majority of parents have a private family doctor, subscribe to some Friendly Society which supplies medical treatment at a low rate, have been in the habit of attending the General Hospital, or have been attended to through the agency of the Poor Law. Under the Hospital heading there are no less than six Honorary and Honorary Assistant Surgeons, together with a Surgeon Dentist, in addition to a resident House Surgeon. Under the Poor Law heading there are two District Medical Officers and two Deputies.

At the Invitation of the School Medical Officer to the East Suffolk County Council, Dr. G. Stewart, I, together with one or two members of the Education Committee and Dr. W. Crowfoot, of Beccles, attended a meeting at Beccles, and subsequently at Ipswich, at the County Council Offices, when the Invalid Children's Aid Association was inaugurated. This Borough was formed into a Division as a distinct unit, to be worked by a separate Committee belonging to the Borough, with occasional reports to the Head Association at Ipswich. This local Division, under the presidency of Miss B. M. C. Doughty, promises to fulfil an important function in the welfare of the children of our schools.

There has been no instance come to my notice of neglect in carrying out the instructions to parents and innumerable instances have come to my notice where the instructions have been carried out with correspondingly beneficial results.

4. Disturbance of School arrangements involved.

Reference to previous heading (2) will show that this disturbance has been reduced to a minimum. In the provided schools, where plenty of class rooms are available, there was no difficulty in obtaining a large room in which to carry on rapidly a well-organised, continuous inspection while it lasted. In the smaller non-provided Schools some

difficulty was experienced in accommodating the older children in the School during the time that perhaps the largest and best classroom was being monopolised by the Medical Inspection. In no instance, however, did the arrangements break down or was it necessary to give the children a half holiday.

C. General statement of the extent and scope of the Medical Inspection carried out during the year.

(i.) Eighty-one visits for the purpose of actual Medical Inspection of children were paid to the various Schools and departments, in addition to innumerable visits to interview head teachers for the purpose of directing the organisation and arranging for convenient dates and times for the inspection of children, to say nothing of voluminous correspondence relating thereto.

(ii.) The instructions of the Board of Education have been carried out in their entirety.

The examinations have included admissions to school life, and "leavings" to the total of 1,676.

(iii.) The number of children inspected, classified for age at date of inspection and sex is as follows :—

Years.	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	Totals
MALES	39	134	104	37	19	20	8	8	23	246	184	23	1	846
FEMALES	32	115	98	40	17	17	11	12	29	233	209	16	1	830
	71	249	202	77	36	37	19	20	52	479	393	39	2	1676

(iv.) In every case a child referred for subsequent or further examination was referred to the parent, treatment arranged for and the parent undertaking to report to the Teacher, the Attendance Officer, or myself, the progress of the case.

(v.) Classified statement of total number of children about whom directions were given.

SUMMARY OF DEFECTS.

Council Schools.

Number of Children examined 919.

Per cent.

4. CLOTHING AND FOOTGEAR.

Fair	..	..	..	..	59	..	6.6
Poor	..	..	..	..	16	..	1.8
Insufficient		..	..	..	1	..	0.1

7. NUTRITION.

Fair	..	..	..	..	47	..	5.3
Poor	..	..	..	..	6	..	0.6

8. CLEANLINESS AND CONDITION OF SKIN.

HEAD

Fair	..	..	..	..	3	..	0.3
Scurf	..	..	..	..	15	..	1.6
Nits	..	..	..	..	95	..	10.7
Acne	..	..	..	..	1	..	0.1

BODY

Fair	..	..	..	..	7	..	0.7
Petechia	..	..	..	..	3	..	0.3
Irritation	..	..	..	..	1	..	0.1

9. TEETH.

Fair	..	..	..	..	204	..	23.0
Poor	..	..	..	..	72	..	8.1
Bad	..	..	..	..	63	..	7.1
Crowded	..	..	..	..	1	..	0.1
Serrated	..	..	..	..	1	..	0.1
Serrated and Pegtopped				..	1	..	0.1
Specific	..	..	..	..	1	..	0.1
Dental Abscess	..	..	..	..	2	..	0.2

10. NOSE AND THROAT.

Per cent.

Rhinorrhea	..	..	..	4	..	0.4
Chronic Rhinorrhea	..	..	..	1	..	0.1
Inflamed Throat	..	..	..	5	..	0.5
Congested	..	..	..	1	..	0.1
Post Pharyngeal Catarrh	..	..	..	1	..	0.1
Rhinitis	..	..	..	1	..	0.1
Nasal Polypus	..	..	..	2	..	0.2
Bifid Uvula	..	..	..	2	..	0.2
Granular Pharyngitis	..	..	..	1	..	0.1

TONSILS

Enlarged	..	..	..	211	..	23.8
Enlarged and Ulcerated	..	..	..	1	..	0.1
Tonsillitis	..	..	..	4	..	0.4

ADENOIDS

Present	86	..	9.7
---------	----	----	----	----	----	-----

SUBMAX AND CERVICAL GLANDS.

Enlarged	..	..	..	149	..	16.8
Tubercular Gland in Neck	..	..	..	1	..	0.1

11. EXTERNAL EYE DISEASES.

Blepharitis	..	..	..	16	..	1.8
Eyelid Cyst	..	..	..	1	..	0.1
Injury to left eye	..	..	..	1	..	0.1

12. VISION.

Strabismus	..	..	..	7	..	0.7
Convergent Strabismus	..	..	..	4	..	0.4
Conjunctivitis and Photophobia	..	..	..	1	..	0.1
Corneal Nebula	..	..	..	1	..	0.1
Iritis and Cataract	..	..	..	1	..	0.1
Eyes of different colour	..	..	..	1	..	0.1
Blind, left eye, from stab	..	..	..	1	..	0.1
Blind	..	..	..	1	..	0.1

VISUAL ACUTY

Right	6/9	..	..	26	..	4.3
	6/12	..	..	8	..	1.3
	6/18	..	..	13	..	2.1

						Per cent.
Left	6/24	..	..	11	..	1.8
	6/36	..	..	3	..	0.5
	6/60	..	..	4	..	0.6
	6/9	..	..	25	..	4.1
	6/12	..	..	11	..	1.8
	6/18	..	..	9	..	1.5
	6/24	..	..	15	..	2.5
	6/36	..	..	3	..	0.5
	6/60	..	..	5	..	0.8
13. EAR DISEASE.						
Otorrhea	..	..	..	10	..	1.1
Intermittent Otorrhea	..	..	..	30	..	3.3
14. HEARING.						
Impaired one side	..	..	..	9	..	1.0
Impaired both sides	..	..	..	23	..	2.5
Defective	..	..	..	1	..	0.1
Dull	..	..	..	1	..	0.1
Throat Deafness	..	..	..	2	..	0.2
15. SPEECH.						
Not plain	..	..	..	1	..	0.1
Thick	..	..	..	2	..	0.2
Nasal	..	..	..	2	..	0.2
Slight Impediment	..	..	..	1	..	0.1
Stutter	..	..	..	1	..	0.1
Lisp	..	..	..	4	..	0.4
Defective	..	..	..	1	..	0.1
16. MENTAL CONDITION.						
Fair	..	..	..	4	..	0.4
Dull	..	..	..	14	..	1.5
Backward	..	..	..	2	..	0.2
Deficient	..	..	..	1	..	0.1
17. HEART AND CIRCULATION.						
Heart sounds not clear	..	..	..	1	..	0.1
Heart sounds not pure	..	..	..	11	..	1.2

Per cent.

Mitral disease	3	..	0·3
Double Mitral disease	3	..	0·3
Systolic Bruit	5	..	0·5
Heart large, several harsh sounds	1	..	0·1
Apex beat displaced	1	..	0·1
Vigorous and Nervous	1	..	0·1

18. LUNGS.

Bronchitis	31	..	3·4
Chronic Bronchitis	2	..	0·2
Chronic Bronchitis and slight Pleurisy	1	..	0·1
Harsh breathing	4	..	0·4
Harsh breathing and dulness at both Apices	1	..	0·1

19. NERVOUS SYSTEM.

Highly strung	4	..	0·4
Violent	1	..	0·1
Sensitive	2	..	0·2
Excitable	1	..	0·1
Very Nervous	1	..	0·1
Dull	1	..	0·1

20. TUBERCULOSIS.

Doubtful	1	..	0·
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21. RICKETS.

Chest	14	..	1·5
Pigeon Breast	3	..	0·3
General	3	..	0·3

22. DEFORMITIES, SPINAL DISEASE, etc.

Left leg wasted	1	..	0·1
Lateral Scoliosis	1	..	0·1
Lost one finger	1	..	0·1
Old head disease, resulting in Lordosis	1	..	0·1

			Per cent.
One side of body smaller than other	I	..	0·I
Paralyzed right side	I	..	0·I
Right Leg and Buttocks slightly Atrophied	I	..	0·I
Specific Nose	I	..	0·I

23. INFECTIOUS OR CONTAGIOUS DISEASES.

Favus	I	..	0·I
Impetigo	3	..	0·3
Ringworm	4	..	0·4
Scabies	I	..	0·I
Skin rough and tongue peeled, typical Scarlet Fever ..	I	..	0·I

24. OTHER DISEASE OR DEFECT.

Asthma	I	..	0·I
Asthma, spasmodic	I	..	0·I
Acne Simplex of Chest and Back	I	..	0·I
Birthmark on Face	2	..	0·2
Chronic Constipation	I	..	0·I
Chronic Dermatitis	3	..	0·3
Comedo	I	..	0·I
Clubbed Foot	I	..	0·I
Catarrh	3	..	0·3
Dermatitis	3	..	0·3
Eczema	10	..	I·I
Enlarged Spleen and Liver ..	I	..	0·I
Gynecomastia	I	..	0·I
Herpes, right ear	I	..	0·I
Jaundice	I	..	0·I
Lichen	I	..	0·I
Long Prepuce	I	..	0·I
Old Scar from Mastoid Operation	I	..	0·I
Old Hip disease, cured	I	..	0·I
Pustule on Shoulder	I	..	0·I
Pityriasis Versicolor	4	..	0·4
Prominent Abdomen	I	..	0·I
Right Inguinal Hernia, incomplete	I	..	0·I
Rough Skin	I	..	0·I

						Per cent.
Rupture	..	..	..	2	..	0.2
Slight wry neck	..	..	..	I	..	0.1
Said to have Kidney Disease	..			I	..	0.1
Septic Chin	..	..	..	I	..	0.1
Slight enlargement of Navel	..			I	..	0.1
Suffers from Biliousness	..			I	..	0.1
Stoops slightly	..	..	..	I	..	0.1
Suffers from severe Uterine Hemorrhage, excluded per- manently	..	..	..	I	..	0.1
Very high roof to mouth	..			I	..	0.1
Number of children not Vaccinated	117			..		13.2

ABSENTEES FROM INSPECTION.

Bronchitis	1	Ringworm	1
Bad Throat	1	Sickness	3
Cold	3	Scarlet Fever	1
Diseased Liver	1	Scabies	1
Influenza	1	Truant	1
Measles	11	Whooping Cough ..	4
Pneumonia	2	Without Cause	2
Per centage of Absentees ..	3.7		

SUMMARY OF DEFECTS.

Voluntary Schools.

Number of children examined, 757.

4. CLOTHING AND FOOTGEAR.

						Per cent.
Fair	..	..	..	..	118	15.7
Poor	..	..	..	..	16	2.1
Bad	..	..	..	..	4	5.3

7. NUTRITION.

Fair	..	..	..	..	56	7.4
Poor	..	..	..	..	8	1.0
Very Thin	..	..	..	..	7	0.9

8. CLEANLINESS AND CONDITION OF SKIN.

HEAD

Fair	..	..	..	..	3	0.4
Dirty	..	..	..	..	1	0.1
Nits	..	..	..	..	83	11.1
Scurf	..	..	..	..	5	0.6
Dry Seborrhea	..	..	..	..	1	0.1

BODY

Fair	..	..	..	..	30	4.0
Dirty	..	..	..	..	4	0.5
Petechia	..	..	..	..	4	0.5
Lice	..	..	..	..	1	0.1

9. TEETH.

Fair	..	..	..	..	122	16.3
Poor	..	..	..	..	37	4.9
Bad	..	..	..	..	35	4.6
Crowded	..	..	..	..	4	0.5
Gum Polypi	..	..	..	..	1	0.1

Per cent.

10. NOSE AND THROAT.

Rhinorrhea	..	..	..	11	..	1.4
Intermittent Rhinorrhea	..	..	..	1	..	0.1
Rhinitis	..	..	..	5	..	0.6
Chronic Rhinorrhea	..	..	..	1	..	0.1
Chronic Rhinorrhea and Laryngitis	..	..	..	1	..	0.1
Chronic Laryngitis	..	..	..	2	..	0.2
Nasal Catarrh	..	..	..	1	..	0.1
Post Pharyngeal Catarrh	..	..	..	1	..	0.1
Excoriated	..	..	..	1	..	0.1
Ulcerated Tongue	..	..	..	1	..	0.1
Bifid Uvula	..	..	..	1	..	0.1
Large Uvula	..	..	..	1	..	0.1
TONSILS						
Enlarged	..	..	..	145	..	19.3
ADENOIDS						
Present	..	..	..	72	..	9.6
SUBMAX AND CERVICAL GLANDS						
Enlarged	..	..	..	136	..	18.2

11. EXTERNAL EYE DISEASE.

Blepharitis	..	..	..	12	..	1.6
Ulcers of Cornea	..	..	..	1	..	0.1
Cornea dull	..	..	..	1	..	0.1
Congenital Ptosis of left eye	..	..	..	1	..	0.1
Prominent Eyeball	..	..	..	1	..	0.1
Old injury to left eye	..	..	..	1	..	0.1
Stye	..	..	..	1	..	0.1

12. VISION.

Strabismus	..	..	..	8	..	1.0
Right internal Strabismus	..	..	..	1	..	0.1
Convergent Strabismus	..	..	..	2	..	0.2
Internal Strabismus	..	..	..	2	..	0.2
Nystagmus	..	..	..	1	..	0.1
Spasm of Ciliary Muscle	..	..	..	1	..	0.1
Pupils unequal	..	..	..	1	..	0.1
Blind left eye	..	..	..	1	..	0.1
Eyes of different colour	..	..	..	1	..	0.1
Peculiar appearance of eyes	..	..	..	1	..	0.1

VISUAL ACUITY

Per cent.

Right	6/9	..	..	..	20	..	5.0
	6/12	..	..	..	21	..	5.2
	6/18	..	..	..	12	..	3.0
	6/24	..	..	..	9	..	2.2
	6/36	..	..	..	2	..	0.5
	6/60	..	..	..	4	..	1.0
Left	6/9	..	..	..	12	..	3.0
	6/12	..	..	..	23	..	5.6
	6/18	..	..	..	14	..	3.5
	6/24	..	..	..	8	..	2.0
	6/36	..	..	..	1	..	0.2
	6/60	..	..	..	2	..	0.5

13. EAR DISEASE.

Otorrhea	..	..	..	..	8	..	1.0
Intermittent Otorrhea	..	..	..	..	21	..	2.8

14. HEARING.

Impaired	..	..	..	..	12	..	1.6
Impaired one side	..	..	..	..	2	..	0.2
Defect of right ear	..	..	..	..	1	..	0.1
Dull	..	..	..	..	1	..	0.1
Intermittent Deafness	..	..	..	..	1	..	0.1
Throat Deafness	..	..	..	..	1	..	0.1
Stammers, with facial contortion	..	..	..	..	1	..	0.1

15. SPEECH.

Thick	..	..	..	..	3	..	0.4
Nasal	..	..	..	..	1	..	0.1
Lisp	..	..	..	..	5	..	0.6
Stutter	..	..	..	..	2	..	0.2
Stammer	..	..	..	..	1	..	0.1
Impediment	..	..	..	..	1	..	0.1
Defective	..	..	..	..	2	..	0.2

16. MENTAL CONDITION.

Fair	..	..	..	..	6	..	0.8
Dull	..	..	..	..	9	..	1.2

Per cent.

Backward	1	..	0·1
Defective	5	..	0·6
Deficient	1	..	0·1
Weak	1	..	0·1
Bad Tempered	1	..	0·1

17. HEART AND CIRCULATION.

Mitral Regurgitation	1	..	0·1
Mitral Bruit	2	..	0·2
Systolic Bruit	2	..	0·2
Systolic murmur at left base	1	..	0·1
Heart sounds not pure	8	..	1·0
Heart sounds not clear, apex beat displaced	1	..	0·1
Heart rapid and irregular	1	..	0·1

18. LUNGS.

Bronchitis	16	..	2·1
Harsh breathing	8	..	1·0
Moist sounds	1	..	0·1
Catarrh	1	..	0·1

19. NERVOUS SYSTEM.

Highly strung	1	..	0·1
Defective	1	..	0·1
Obstinate	1	..	0·1
Excitable	1	..	0·1
Emotional	1	..	0·1

20. TUBERCULOSIS.

Coughs up Blood	1	..	0·1
Right Hip	1	..	0·1
Left Hip	1	..	0·1
Throat	1	..	0·1
Doubtful	4	..	0·5

21. RICKETS.

Chest	11	..	1·4
Pigeon Breast	5	..	0·6
General	2	..	0·2

22. DEFORMITIES, SPINAL DISEASE, etc.

Ankylosed Right Hip, Lordosis	I	..	0·1
Ankylosed Knee	I	..	0·1
Curvature of Spine	2	..	0·2
Flat Chest	2	..	0·2
Head Dolichocephalic type ..	I	..	0·1
Head very large	I	..	0·1
Lumbar Kyphosis	I	..	0·1
Left arm wasted	I	..	0·1
Lump in each Calf	I	..	0·1
Marked Dorsal Kyphosis ..	I	..	0·1
Old Abscess of Hip, healed, left leg short	I	..	0·1
Occipitofrontal 19 inches, almost microcephalic.. .. .	I	..	0·1
Prominent Chest	I	..	0·1
Paralyzed left arm and side ..	I	..	0·1
Right lateral Scoliosis	I	..	0·1
Slight stoop	I	..	0·1
Very small and short	2	..	0·2

23. INFECTIOUS OR CONTAGIOUS DISEASE.

Chickenpox	I	..	0·1
Impetigo	7	..	0·9
Ringworm	3	..	0·4
Scabies and Eczema	I	..	0·1
Scabies	I	..	0·1

24. OTHER DISEASE OR DEFECT.

Abscess of eyelid	I	..	0·1
Birthmark on face	I	..	0·1
Capillary Nevus	I	..	0·1
Chronic Dermatitis	2	..	0·2
Catarrh	I	..	0·1
Cleft Palate	I	..	0·1
Dyspepsia	I	..	0·1
Dental Abscess	I	..	0·1
Eczema	5	..	0·6
Furuncles on Neck	2	..	0·2

						Per cent.
Headaches from old injury to						
frontal bone	I	..	0·I			
Inward Rupture	I	..	0·I			
Incontinence of Urine	I	..	0·I			
Left Breast enlarged	I	..	0·I			
Left undescended Testicle ..	I	..	0·I			
Migraine	I	..	0·I			
Nevus under Chin	I	..	0·I			
Pityriasis Versicolor	4	..	0·5			
Prominent Abdomen	I	..	0·I			
Right Inguinal Hernia	2	..	0·2			
Rupture	I	..	0·I			
Septic Toe	I	..	0·I			
Subject to Night Terrors ..	I	..	0·I			
Scabby Chin	I	..	0·I			
Sore Chin	I	..	0·I			
Small Tumour above right eye	I	..	0·I			
Subject to Vomiting	I	..	0·I			
Warts on hands and arms ..	2	..	0·2			
Worms	I	..	0·I			
Weak Ankle	I	..	0·I			
Number of children not vaccinated	84	..	11·2			

ABSENTEES FROM INSPECTION.

St. Vitus Dance ..	I	In Hospital ..	..	..	I
Measles	I	At School Treat ..	..	..	I
Under Medical treatment	2	Without cause ..	..	..	4
Percentage of Absentees			1·3		

(vi). The average time occupied per inspection per head was 6 mins. 1.5 secs. This may seem a short time to devote to an exhaustive examination of each child but it must be remembered that no time was lost between the inspections, nor in loosening the clothing of the children, the children following up one another to the doctor's table with clock-like regularity, due to the organisation of the head teacher; the clothes were loosened by the parent, who attended in at least 80 per cent. of the children examined, the clerical work of the examination was done by another teacher deputed for the purpose so that the Medical Inspector was enabled to concentrate the whole of his attention to the examination of the child.

(D) General Review.

Reference to the previous detailed tables of defects will, by careful perusal, shew in actual numbers and also in percentages, the condition of children attending both the provided and non-provided schools.

(e) The housing conditions and the home circumstances of the children attending the Public Elementary Schools may be described as good. There are not many instances of neglectful parents. The condition of the Cottage property is also good, with the exception of some of the cottages situated on what is known as the North Beach, and a few habitations, the address of which may be described as at the rear of such and such a street or such and such a cottage.

(F) Review of the methods employed for the treatment of defects.

Reference has already been made, in detail, to this matter, in a previous portion of the Report. It is, however, common knowledge with people who have to do with School children that such diseases as Discharging Ears, Ringworm and some forms of Skin Diseases are extremely difficult, if not impossible, to cure and have to be under treatment for several months or perhaps years. The parents of the children thus afflicted are apt to become tired of the continual worry and interference with their work necessitated by continual visits to Medical men or Charitable Institutions, and when a child appears, after about eight months treatment in a case of say Ringworm, to be a lot better and the hair to have commenced to grow over the patches, to

assume that the child is cured, to leave off treatment, and send the child again to school, whilst all the time the contagion is still existent. This, to a large extent, may be obviated by the establishment of a School Clinic. This latter procedure, in addition to furthering the treatment of the disease, would also give your S.M.O. more direct control over cases which are apparently cured but are still contagious.

With reference to the employment of School Nurses it will be noted in a previous portion of the report, that, with the loyal co-operation of the parent and the teacher, the employment of a Nurse during the actual inspection of the children in the School, has been rendered superfluous. In connection with enlisting the services of the District Nursing Associations for the treatment of children in their own homes found to be defective, there has been some correspondence with the Board of Education and I entirely agree with the Board that no Nurse should be allowed to treat any defect whatever, except under the control of a Medical Practitioner, and from what has hitherto been written with reference to the facilities for obtaining such supervision, I maintain that this is the only way in which the District, or other Nurses can be profitably employed in *treatment*.

(G) Review of action taken to detect and prevent the spread of infectious diseases, including reference to action taken under 45 (b), 53 (b), and 57 of the Code of 1908.

Reference to the Memorandum received from the Local Government Board, which will be found at the end of this report, will shew in detail the exact methods which are employed in this respect. Further remarks on the subject are therefore rendered unnecessary and would be merely repetition.

The methods employed have been for some time in force, and are issued from the office of the Medical Officer of Health. It is exceedingly satisfactory to your S.M.O. to find that his action has now received official sanction by the issue of the circular.

(H) Review of methods adopted and the adequacy of such methods for dealing with blind, deaf, mentally or physically defective and epileptic children, under the Acts of 1893 and 1899.

There is no school in the neighbourhood where these children can be properly dealt with, and it has been the practice of this authority

to spend large sums in having children who have been so certified sent to be educated in special schools in various parts of the country. The question of the establishment of a school for this purpose in the immediate neighbourhood in order to minimise the cost of education, travelling expenses, and the like, will in the near future, engage the earnest consideration of the Education Authority.

6. (A) **General review of hygienic conditions prevalent in the Schools.**

From what here follows it will be noticed that under this heading each school premises has been thoroughly inspected by the S.M.O. individually and also with the willing assistance of the Clerk of Works.

In detailing the results of such inspections the following headings will be taken into account, and in the respective schools will be referred to numerically.

1. Sanitation and surroundings.
2. Ventilation.
3. Lighting.
4. Warming.
5. Equipment.
6. Sanitation.
- 6a. Lavatories
7. Water Supply, washing and drinking.
8. Cleanliness of Schoolrooms and Cloakrooms.
9. Arrangements for drying Cloaks and Boots.
10. Relation of General Arrangement of School to the health of the children.
- 10a. Playground.

Council Schools.

CHURCH ROAD BOYS.

1. North end of town, St. Margaret's Road, on high land, very open, exposed to ozone laden North East wind. No building of any particular height in the near neighbourhood.
 2. Two Tobin tubes in each classroom, Boyle's ventilators in roof. Casement windows with inward flaps at tops, inward flow of air passes over radiators in addition to which there are some open fire-places.
 3. Natural :—From windows, very good. Artificial :—Incandescent gas, not good.
 4. Open fire-places and hot water pipes.
 5. Very good throughout.
 6. Six trough water closets. Channel urinal on the screen wall of the water closets. Both these are supplied with an efficient water supply from the Company's main, but only flushed automatically three times between 9 a.m. and 5 p.m.; were clean and in good order. Separate closet for teachers. Modern drainage system with interceptor and inspection chambers.
 - 6a. Six stoneware lavatory basins with cold water laid on in two cloakrooms; separate basin for teachers and sink for caretaker.
 7. Company's water, good, pressure bad, in summer by 3 p.m. water exhausted from cistern in roof.
 8. Swept down every night, floors and desks washed with disinfectant at the Christmas, Easter and Midsummer vacations.
 9. Hot water pipes in cloak rooms, an air upcast for carrying off moisture, boys' coats are dried by noon, if they come wet to morning school.
 10. Modern type of school, up-to-date and in good order.
 - 10a. Good and large but wants paving. There is a lock-up cage in cloak room for boys' dinners who are unable to go home at mid-day.
- Number of children inspected, 77.
Absent on day of inspection, 1.

Height and weight of children at various ages :—

Age	7-8	8-9	11-12	12-13	13-14	14-15
Number inspected	1	2	2	49	17	6
Average height in inches ..	50	50 $\frac{3}{4}$	57 $\frac{3}{4}$	56 $\frac{1}{2}$	58	59 $\frac{1}{4}$
Average height in centimeters ..	127.0	128.9	146.6	143.5	147.3	150.4
Standard height in inches ..	45.9	47.0	53.5	54.9	56.9	59.3
Standard height in centimeters	116.5	119.3	135.9	139.4	144.5	150.6
Average weight in pounds ..	58	58 $\frac{1}{2}$	77	75 $\frac{1}{2}$	81	85
Average weight in kilogrammes	26.3	26.5	34.9	34.2	36.7	38.6
Standard weight in pounds ..	49.7	54.9	72.0	76.7	82.6	92.0
Standard weight in kilogrammes	22.5	24.9	32.7	34.8	37.5	41.7

NUMBER AND PERCENTAGE OF DEFECTS FOUND.

Schedule No.									Per cent.
4 Fair	3	..	..	..	3.8				
Poor	2	..	..	..	2.5				
7 Fair	4	..	..	..	5.1				
Poor	3	..	..	..	3.8				
8a Fair	1	..	..	..	1.2				
8b Fair	1	..	..	..	1.2				
9 Fair	18	..	..	..	23.3				
Poor	7	..	..	..	9.0				
Bad	6	..	..	..	7.7				
10 Inflamed	1	..	..	..	1.2				
Congested	1	..	..	..	1.2				
10a Enlarged	13	..	..	..	16.8				
Enlarged and Ulcerated	1	..	..	..	1.2				
10b Adenoids	5	..	..	..	6.4				
10c Enlarged	12	..	..	..	15.5				
12a Visual Acuity	6/9 1	..	..	..	1.2				
R	6/18 1	..	..	..	1.2				
6/24	2	..	..	..	2.5				
6/36	1	..	..	..	1.2				
6/60	1	..	..	..	1.2				
12b L	6/9 1	..	..	..	1.2				
6/18	1	..	..	..	1.2				
6/24	1	..	..	..	1.2				

							Per cent.
		$\frac{6}{36}$	2	..	..	..	2.5
		$\frac{6}{60}$	1	..	..	..	1.2
13	Intermittent left Otorrhea		2	..	..	..	2.5
14	Impaired one side ..		4	..	..	..	5.1
	Impaired both sides ..		1	..	..	..	1.2
16	Dull		1	..	..	..	1.2
17	Heart sounds not clear		1	..	..	..	1.2
	Mitral disease		1	..	..	..	1.2
18	Harsh breathing ..		3	..	..	..	3.8
19	Highly strung		1	..	..	..	1.2
21	Chest		3	..	..	..	3.8
	Pigeon Breast		2	..	..	..	2.5
23	Scabies		1	..	..	..	1.2
24	Gynecomastia		1	..	..	..	1.2
	Pustule on Shoulder ..		1	..	..	..	1.2
	Right Inguinal hernia, incomplete		1	1.2
	Rough Skin		1	1.2
	Slight wry neck		1	1.2

ABSENT FROM INSPECTION.

Sickness	1	1.2
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PERSONAL HISTORY, PREVIOUS INFECTIOUS ILLNESS.

Measles	68	88
Whooping Cough ..	48	59
Chicken Pox	33	..	..	..	42
Scarlet Fever	18	..	..	..	23
Diphtheria	6	..	..	..	7
Not vaccinated ..	9	..	..	..	11

CHURCH ROAD GIRLS.

1. North end of town, St. Margaret's Road, on high land, very open, exposed to ozone laden North East wind. No building of any particular height in the near neighbourhood.

2. Two Tobin tubes in each classroom, Boyle's ventilators in

roof. Casement windows with inward flaps at tops, inward flow of air passes over radiators in addition to which there are some open fire-places.

3. Natural :—From windows, very good. Artificial :—Incan-
descent gas, not good.

4. Open fire-places and hot water pipes.

5. Very good throughout.

6. Nine trough water closets; these are supplied with an efficient water supply from the Company's main but only flushed automatically three times between 9 a.m. and 5 p.m.; were clean and in good order. Separate closet for teachers. Modern drainage system with interceptor and inspection chambers.

6a. Four lavatory basins with cold water laid on in two cloak-rooms.

7. Company's water, good, pressure bad; in summer by 3 p.m. water exhausted from cistern in roof.

8. Swept down every night, floors and desks washed with disinfectant at the Christmas, Easter and Midsummer vacations.

9. Hot water pipes in cloak rooms and an air upcast for carrying off moisture, cloaks are dried by noon if they come wet to morning school.

10. Modern type of school, up-to-date and in good order.

10a. Large and good paved playground. There are lock-up cages in cloak rooms for girls' dinners who are unable to go home at mid-day.

Number of Children inspected, 80.

Absent on day of Inspection, 3.

Height and weight of Children at various ages :—

Age	8-9	10-11	11-12	12-13	13-14	14-15	15-16
Number inspected	1	2	1	36	35	4	1
Average height in inches ..	50 $\frac{1}{4}$	54 $\frac{1}{4}$	52 $\frac{3}{4}$	57	58 $\frac{1}{2}$	58 $\frac{3}{4}$	62
Average height in centimeters ..	127.6	137.8	133.9	144.7	148.6	149.2	157.4
Standard height in inches ..	46.6	51.0	53.1	55.6	57.7	59.8	60.9
Standard height in centimeters	118.3	129.5	134.8	141.2	146.5	151.9	154.6
Average weight in pounds ..	61	67 $\frac{3}{4}$	66	76 $\frac{1}{2}$	83	88 $\frac{1}{2}$	103
Average weight in kilogrammes	27.7	30.7	29.9	34.7	37.6	40.1	46.7
Standard weight in pounds ..	52.1	62.0	68.1	76.4	87.2	96.7	106.3
Standard weight in kilogrammes	23.6	28.1	30.8	34.7	39.6	43.8	48.2

NUMBER AND PERCENTAGE OF DEFECTS FOUND.

Schedule No.								Per cent.
7	Fair	..	..	..	..	I	..	1.2
8a	Nits	..	..	..	..	14	..	17.5
9	Fair	..	..	..	..	26	..	32.5
	Poor	..	..	..	..	10	..	12.5
	Bad	..	..	..	..	3	..	3.7
	Dental Abscess	..	..	..	..	I	..	1.2
10	Inflamed Throat	..	..	..	..	I	..	1.2
10a	Enlarged	..	..	..	..	19	..	23.7
10b	Adenoids	..	..	..	..	I	..	1.2
10c	Enlarged	..	..	..	..	10	..	12.5
11	Right Blepharitis	..	..	..	..	I	..	1.2
12a	Visual Acuity	..	..	R	6/9	3	..	3.7
					6/18	3	..	3.7
					6/24	3	..	3.7
12b				L	6/9	2	..	2.5
					6/18	I	..	1.2
					6/24	6	..	7.5
					6/60	I	..	1.2
13	Left intermittent Otorrhea	..	..	..	..	I	..	1.2
	Double Otorrhea	..	..	..	..	I	..	1.2
14	Impaired one side	..	..	..	..	3	..	3.7
	Defective	..	..	..	..	I	..	1.2
17	Heart sounds impure	..	..	..	..	2	..	2.5
	Mitral disease	..	..	..	..	I	..	1.2
19	Very Nervous	..	..	..	..	I	..	1.2
22	Old head disease, resulting in							
	Lordosis	..	..	..	..	I	..	1.2
24	Birthmark on Face	..	..	..	..	I	..	1.2
	Pityriasis Versicolor	..	..	..	..	I	..	1.2

ABSENT FROM INSPECTION.

Cold	..	..	..	I	..	..	1.2
Bronchitis	..	..	..	I	..	..	1.2
Influenza	..	..	..	I	..	..	1.2

PERSONAL HISTORY, PREVIOUS INFECTIOUS ILLNESSES.

Measles	..	..	..	70	..	..	87
Whooping Cough	..	..	..	52	..	..	65
Chicken Pox	..	..	..	38	..	..	47
Scarlet Fever	..	..	..	14	..	..	17
Diphtheria	..	..	..	8	..	..	10
Not Vaccinated	..	..	..	9	..	..	11

CHURCH ROAD INFANTS'.

1. A one story building at north end of town, St. Margaret's Road, on high land, very open, exposed to ozone laden North East wind. No building of any particular height in the near neighbourhood.
2. Two Tobin tubes in each classroom, Boyle's ventilators and casement windows in roof and walls, the latter having inward flaps at top; inward flow of air passes over radiators, in addition to which there are some open fire places.
3. Natural:—From windows, very good. Artificial:—Incan-
descent gas, not good.
4. Open fire places and hot water pipes.
5. Very good throughout.
6. Eight trough water closets, clean and in good condition; channel urinal on screen wall of Water Closets. Both these are supplied with an efficient water supply from the Company's main, but only flushed automatically three times between 9 a.m. and 5 p.m. Modern drainage system; separate accommodation for teachers.
- 6a. Six lavatory basins with cold water laid on in two cloak-rooms.
7. Company's water, good, occasionally runs short in summer, has not done so lately.
8. Swept down every night, floors and desks washed with disinfectant at the Christmas, Easter and Midsummer vacations.
9. Hot water pipes in cloakrooms, ventilation by casement windows with inward flap. Insufficient accommodation for cloaks, a portable carrier is fixed down centre of cloakrooms for surplus cloaks.

10. Modern type of school, up-to-date, and in good order ; has large marching hall.

10a. Good large paved playground.

Number of children inspected, 61.

Absent on day of inspection, 5.

Height and weight of children at various ages :—

	Males.			Females.		
Age	4-5	5-6	7-8	4-5	5-6	6-7
Number inspected	13	16	1	8	19	4
Average height in inches	40 $\frac{1}{4}$	42 $\frac{1}{2}$	44 $\frac{1}{2}$	39 $\frac{1}{2}$	42 $\frac{3}{4}$	44
Average height in centimeters	102·2	107·9	113·0	100·3	108·5	111·7
Standard height in inches	..	41·0	45·9	..	40·5	42·8
Standard height in centimeters	..	104·1	116·5	..	102·8	108·7
Average weight in pounds	39 $\frac{1}{2}$	40 $\frac{3}{4}$	45	36 $\frac{1}{2}$	39	41
Average weight in kilogrammes	17·9	18·4	20·4	16·5	17·7	18·6
Standard weight in pounds	..	39·9	49·7	..	39·2	41·7
Standard weight in kilogrammes	..	18·1	22·5	..	17·8	18·9

NUMBER AND PERCENTAGE OF DEFECTS FOUND.

Schedule No.	Males.			Females.		
	No.	Per cent.		No.	Per cent.	
4. Fair	2	3·2	..			
7. Fair	2	3·2	..			
8a. Nits	1	1·6	..	5	8·1	
8b. Irritation .. ..	..	..	..	1	1·6	
9. Fair	1	1·6	..	5	8·1	
Poor .. ..	..	..	..	9	14·7	
Bad	2	3·2	..	1	1·6	
10. Bifid Uvula .. ..	..	..	..	1	1·6	
10a. Enlarged	6	9·8	..	7	11·4	
Inflamed .. ..	..	..	..	1	1·6	
10b. Adenoids	1	1·6	..	6	9·8	
10c. Enlarged	5	8·1	..	10	16·3	
11 Eyelid Cyst .. ..	..	..	..	1	1·6	
13. Intermittent Otorrhea .. ..	..	..	..	1	1·6	
14 Impaired one side	1	1·6				
18. Slight Bronchitis ..	2	3·2	..	2	3·2	

Schedule No.	Males.			Females.	
	No.	Per cent.		No.	Per cent.
	Chronic Bronchitis	1	1.6		
19.	Very Nervous ..	1	1.6		
23	Ringworm .. ..	..	.. ..	3	4.9
24	Prominent Abdomen	1	1.6		
	Chronic Constipation	..	.. ..	1	1.6
	Slight Catarrh ..	..	.. ..	1	1.6
	Eczema .. ..	..	.. ..	2	3.2
	Herpes, right ear ..	..	.. ..	1	1.6
	Chronic Dermatitis	..	.. ..	1	1.6
	Worms .. ..	..	.. ..	1	1.6

ABSENT FROM INSPECTION.

	No.	Per cent.
Measles	4	6.4
Bad Cold	1	1.6

PERSONAL HISTORY, PREVIOUS INFECTIOUS ILLNESSES.

	No.	Per cent.
Measles	34	55
Whooping Cough	23	37
Chicken Pox	21	34
Scarlet Fever	2	3.2
Not Vaccinated	9	14

ROMAN HILL BOYS'.

1. On Roman Hill, west part of town. Good class of modern cottage property in neighbourhood, and wide streets.

2. Two Tobin tubes in each classroom. Open fireplaces with ventilators into chimneys, tops of windows fall inwards. Fresh air inlets at back of radiators.

3. Natural—Large casement windows. Artificial:—Electric. Candles are provided in case of failure of the latter.

4. Open fireplaces and hot water pipes.

5. Very good throughout.

6. Six trough water closets, automatically flushed three times between 9 a.m. and 4.30 p.m. Large urinal, clean and in good condition. There is separate closet and lavatory accommodation for teachers.

6a. Six stoneware lavatory basins in two cloakrooms, also stoneware sink for caretaker, all in good order.

7. Company's water, supply ample and constant. There is a fountain for drinking purposes in playground.

8. Floors swept over every night. Floors scrubbed and desks washed at Easter, August and Christmas vacations.

9. Hot water pipes in cloakrooms with an aperture and flue from ceiling.

10. Modern type of school, up-to-date and in good order.

10a. Excellent paved playground with large open shelter at one end.

Number of Children inspected, 86.

Absent on day of inspection. 1.

Height and weight of children at various ages :—

Age	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15
Number inspected	1	1	1	2	3	38	37	3
Average height in inches ..	49 $\frac{1}{4}$	46 $\frac{1}{2}$	52	52 $\frac{1}{2}$	58 $\frac{1}{2}$	56 $\frac{1}{4}$	57 $\frac{3}{4}$	60 $\frac{3}{4}$
Average height in centimeters..	125.1	118.1	132.0	133.3	148.6	142.8	146.6	154.3
Standard height in inches ..	45.9	47.0	49.7	51.8	53.5	54.9	56.9	59.3
Standard height in centimeters	116.5	119.3	126.2	131.5	135.9	139.4	144.5	150.6
Average weight in pounds ..	53	52	57	56	81 $\frac{1}{4}$	74 $\frac{1}{2}$	78 $\frac{3}{4}$	89 $\frac{1}{2}$
Average weight in kilogrammes	24.0	23.6	25.9	25.4	36.8	33.8	35.7	40.6
Standard weight in pounds ..	49.7	54.9	60.4	67.5	72.0	76.7	82.6	92.0
Standard weight in kilogrammes	22.5	24.9	27.4	30.6	32.7	34.8	37.5	41.7

NUMBER AND PERCENTAGE OF DEFECTS FOUND.

Schedule No.	No.	No.	Per cent.
4 Insufficient	1	..	1.1
7 Fair	1	..	1.1
Poor	1	..	1.1
8a Nits	2	..	2.3
Scurf	2	..	2.3
9 Fair	20	..	23.3
Poor	8	..	9.3

Schedule No.						No.	Per cent.
	Bad	..	..	..	..	3	3.4
	Crowded	..	..	..	..	1	1.1
10	Tonsillitis	..	..	..	..	1	1.1
10a	Enlarged	..	..	..	..	26	30.2
10b	Adenoids..	..	..	..	..	8	9.3
10c	Enlarged	..	..	..	..	9	10.4
11	Blepharitis	..	..	..	..	4	4.5
	Strabismus	..	..	..	..	2	2.3
12	Visual Acuity	R.	6/9	..	..	5	5.8
			6/12	..	..	1	1.1
			6/18	..	..	2	2.3
			6/24	..	..	1	1.1
			6/60	..	..	1	1.1
		L.	6/9	..	..	5	5.8
			6/12	..	..	2	2.3
			6/18	..	..	1	1.1
			6/24	..	..	3	3.4
13	Intermittent Otorrhea	..	..	..	..	2	2.3
14	Slightly impaired	..	..	..	..	1	1.1
15	Stutter	..	..	..	..	1	1.1
	Lisp	..	..	..	..	1	1.1
	Defective	..	..	..	..	1	1.1
16	Dull	..	..	..	..	2	2.3
17	Systolic Bruit	..	..	..	..	2	2.3
18	Slight Bronchitis	..	..	..	..	1	1.1
19	Highly Strung	..	..	..	..	1	1.1
21	Chest	..	..	..	..	1	1.1
	Slight Rickets	..	..	..	..	1	1.1
22	Specific Nose	..	..	..	..	1	1.1
	Paralyzed Right Side	..	..	..	..	1	1.1
	Right Leg and Buttocks slightly Atrophied	..	..	..	..	1	1.1
23	Favus	..	..	..	..	1	1.1
24	Asthma	..	..	..	..	1	1.1
	Old Rupture	..	..	..	..	1	1.1
	Chronic Dermatitis	..	..	..	..	1	1.1
	Pityriasis Versicolor	..	..	..	..	3	3.4

ABSENT FROM INSPECTION.

Without Cause 1 .. 1.1

PERSONAL HISTORY, PREVIOUS INFECTIOUS ILLNESSES.

	No.	Per cent.
Measles	70	81
Whooping Cough	42	48
Chicken Pox	16	18
Scarlet Fever	10	11
Diphtheria	5	5.8
Not Vaccinated	18	20

ROMAN HILL GIRLS'.

1. On Roman Hill, west part of town. Good class of modern cottage property in neighbourhood, and wide streets.

2. Two Tobin tubes in each classroom, Boyle's ventilator in roof. Air inlets at back of radiators.

3. Natural :—Large casement windows. Artificial :—Electric. Candles are provided in case of failure of the latter.

4. Open fireplaces and hot water pipes.

5. Very good throughout.

6. Eight trough water closets, automatically flushed three times between 9 a.m. and 4.30 p.m. There is separate closet and lavatory accommodation for teachers.

6a. Four stoneware lavatory basins in two cloakrooms, also stoneware sink for caretaker. All in good order.

7. Company's water, supply ample and constant. There is a fountain for drinking purposes in playground.

8. Floors swept over every night. Floors scrubbed and desks washed at Easter, August and Christmas vacations.

9. Hot water pipes in cloakrooms with an aperture and flue from ceiling.

10. Modern type of school, up-to-date and in good order.

10a. Excellent paved playground with large open shelter at one end.

Number of children inspected. 102.

Absent on day of inspection. 3.

Height and weight of children at various ages :—

Age	7-8	9-10	10-11	11-12	12-13	13-14
Number inspected	1	4	1	7	53	36
Average height in inches ..	50	51 $\frac{3}{4}$	57	54 $\frac{3}{4}$	58	59
Average height in centimeters	127.0	131.4	144.7	139.0	147.3	149.8
Standard height in inches ..	44.4	48.7	51.0	53.1	55.6	57.7
Standard height in centimeters	112.7	123.7	129.5	134.8	141.2	146.5
Average weight in pounds ..	53	51 $\frac{1}{2}$	77	65 $\frac{1}{2}$	79	83 $\frac{1}{2}$
Average weight in kilogrammes	24.0	23.3	34.9	29.6	35.8	37.8
Standard weight in pounds ..	47.5	55.5	62.0	68.1	76.4	87.2
Standard weight in kilogrammes	21.5	25.1	28.1	30.8	34.7	39.6

NUMBER AND PERCENTAGE OF DEFECTS FOUND.

Schedule No.	No.	Per cent.
7 Fair	2	1.9
8a Nits	17	16.6
Scurf	1	0.9
Fairly clean	2	1.9
8b Fairly Clean	2	1.9
9 Fair	22	21.5
Poor	12	11.7
Bad	5	4.9
Dental Abscess	1	0.9
Specific	1	0.9
10 Bifid Uvula	1	0.9
Post Pharyngeal Catarrh	1	0.9
10a Enlarged	25	24.5
10b Adenoids	9	8.8
10c Enlarged	12	11.7
11 Blepharitis	5	4.9
12 Convergent Strabismus	1	0.9
Visual Acuity R. $\frac{6}{9}$	6	5.8
$\frac{6}{12}$	1	0.9
$\frac{6}{18}$	1	0.9
$\frac{6}{24}$	2	1.9
L. $\frac{6}{9}$	8	7.8
$\frac{6}{12}$	1	0.9
$\frac{6}{18}$	1	0.9
$\frac{6}{24}$	1	0.9

Schedule No.					No.		Per cent.
13	Otorrhea	..	..	..	3	..	2.9
	Intermittent Otorrhea	..	..	..	2	..	1.9
14	Impaired..	..	..	..	4	..	3.9
15	Lisp	..	..	..	1	..	0.9
	Slight Impediment	..	..	..	1	..	0.9
16	Dull	..	..	..	1	..	0.9
17	Mitral disease	..	..	..	1	..	0.9
	Systolic Bruit	..	..	..	2	..	1.9
	Heart sounds impure	..	..	..	1	..	0.9
18	Bronchitis	..	..	..	2	..	1.9
21	Chest	..	..	..	1	..	0.9
22	One side of body slightly larger than other				1	..	0.9
23	Impetigo	..	..	..	1	..	0.9
24	Slight Catarrh	..	..	..	1	..	0.9
	Said to have kidney disease	..	..	..	1	..	0.9
	Lichin	..	..	..	1	..	0.9
	Left Mastoid operation, old Scar	..	..	..	1	..	0.9
	Eczema Facialis	..	..	..	2	..	1.9
	Chronic Dermatitis	..	..	..	1	..	0.9
	Acne Simplex of Chest and Back	..	..	..	1	..	0.9
	Comedo	..	..	..	1	..	0.9
	Threadworms	..	..	..	1	..	0.9

ABSENT FROM INSPECTION.

	No.	Per cent.
Measles	1	0.9
Scarlet Fever	1	0.9
Bad Throat	1	0.9

PERSONAL HISTORY, PREVIOUS INFECTIOUS ILLNESSES.

	No.	Per cent.
Measles	83	81
Whooping Cough	51	50
Chicken Pox	31	30
Scarlet Fever	26	25
Diphtheria	7	6
Not Vaccinated.. .. .	14	13

ROMAN HILL INFANTS'.

1. On Roman Hill, west part of town. Good class of modern cottage property in neighbourhood. and wide streets.
2. Two Tobin tubes in each classroom, Boyle's ventilator in roof. Air inlet at back of radiator. A one story building.
3. Natural :—Large casement windows. Artificial :—Electric. Candles are provided in case of failure of the latter.
4. Open fireplaces and hot water pipes.
5. Very good throughout.
6. Nine trough water closets and large urinal, flushed automatically three times between 9 a.m. and 4.30 p.m. There is separate closet and lavatory accommodation for teachers.
- 6a. Six stoneware lavatory basins in two cloakrooms also stoneware sink for caretaker. All in good order.
7. Company's water, supply ample and constant. There is a fountain for drinking purposes in playground.
8. Floors swept over every night. Floors scrubbed and desks washed at Easter, August and Christmas vacations.
9. Hot water pipes in cloakrooms with an aperture and flue from ceiling.
10. Modern type of school, up-to-date, and in good order.
- 10a. Excellent paved playground with large open shelter at one end.

Number of children inspected, 72

Absent on day of Inspection, *nil*.

Height and weight of children at various ages :—

	Males.					Females.						
	3-4	4-5	5-6	6-7	7-8	3-4	4-5	5-6	6-7	7-8	8-9	
Age												
Number inspected	6	14	18	5	1	4	6	10	5	2	1	
Average height in inches ..	37 $\frac{3}{4}$	40	41 $\frac{1}{2}$	44 $\frac{1}{2}$	48 $\frac{1}{4}$	38	38 $\frac{3}{4}$	42	45	47 $\frac{3}{4}$	43 $\frac{1}{2}$	
Average height in centimeters	95.8	101.6	105.4	113.0	122.5	96.5	98.4	106.6	114.3	121.2	110.5	
Standard height in inches ..	—	—	41.0	44.0	45.9	—	—	40.5	42.8	44.4	46.6	
Standard height in centimeters	—	—	104.1	111.7	116.5	—	—	102.8	108.7	112.7	118.3	
Average weight in pounds ..	35 $\frac{1}{2}$	38	39 $\frac{3}{4}$	46	51	35	35 $\frac{1}{2}$	41	44 $\frac{3}{4}$	53 $\frac{1}{2}$	38	
Average weight in kilogrammes	16.1	17.2	18.0	20.9	23.1	15.9	16.1	18.6	20.3	24.2	17.2	
Standard weight in pounds ..	—	—	39.9	44.4	49.7	—	—	39.2	41.7	47.5	52.1	
Standard weight in kilogrammes	—	—	18.1	20.2	22.5	—	—	17.8	18.9	21.5	23.6	

NUMBER AND PERCENTAGE OF DEFECTS FOUND.

Schedule No.					Males		Females	
					No.	Per cent.	No.	Per cent.
4.	Fair	..	..	..	1	1.3	1	1.3
7.	Fair	..	..	..	3	4.1	1	1.3
8a.	Nits	..	..	..	..	..	2	2.7
	Scurf	..	..	..	3	4.1	1	1.3
9.	Fair	..	..	..	11	15.2	5	6.9
	Poor	..	..	..	5	6.9	2	2.7
	Bad	..	..	..	2	2.7	2	2.7
10.	Rhinorrhea	..	..	..	1	1.3		
	Inflamed Throat	..	..	..	1	1.3		
10a.	Enlarged	..	..	..	12	16.6	10	13.8
10b.	Adenoids	..	..	..	6	8.3	3	4.1
10c.	Enlarged	..	..	..	8	11.1	2	2.7
12.	Slight Convergent Strabismus					..	1	1.3
13.	Intermittent Otorrhea				3	4.1		
	Otorrhea	..	..	..	3	4.1		
14.	Impaired	..	..	..	2	2.7		
16.	Dull	..	..	..	1	1.3		
18.	Slight Bronchitis	..	..	..	..	..	1	1.3
	Harsh Breathing and dulness at both Apices				1	1.3		
19.	Violent	..	..	..	..	..	1	1.3
20.	Said to be Consumptive				1	1.3		
23.	Impetigo	..	..	..	3	4.1		
24.	Eczema of Neck	..	..	..	1	1.3		
	Septic Chin	..	..	..	..	..	1	1.3
	Clubbed Foot	..	..	..	..	..	1	1.3
	Occasional Catarrh				..	..	1	1.3

PERSONAL HISTORY, PREVIOUS INFECTIOUS ILLNESSES.

					No.	Per cent.
Measles	..	..	..	..	57	79
Whooping Cough	..	..	..	..	29	40
Chicken Pox	..	..	..	..	20	27
Scarlet Fever	..	..	..	..	6	8.3
Diphtheria	..	..	..	..	1	1.3
Not Vaccinated	..	..	..	..	11	15

LOVEWELL ROAD BOYS'.

1. Lovewell Road, open, no high buildings in the near vicinity, good class cottage property and residential houses in neighbourhood.
2. Two Tobin tubes in each classroom, Boyle's ventilator in roof, fresh air inlets at back of radiators. A one story building.
3. Natural :—from large windows. Artificial :—incandescent gas, burners too low.
4. Open fireplaces and hot water pipes ; Head Master complains of deficiency of radiators in cold weather ; only one stove and one radiator in each classroom, main room satisfactory, but others cannot be sufficiently warmed.
5. Very good ; a few more desks required.
6. Five trough closets and large urinal, clean ; separate closet for teachers, clean. Children's closets, flushed automatically three times between 9 a.m. and 4.30 p.m.
- 6a. Six stoneware wash basins in two cloakrooms ; additional separate basin for teachers and sink for caretaker, all clean.
7. Public supply, good and ample. Drinking fountain in playground but water not turned on.
8. Scrubbed out three times per annum, viz. :—at Easter, August and Christmas vacations ; swept out every night.
9. Hot water pipes in cloakrooms, ventilated by air inlet and flue from ceiling.
10. Modern, up-to-date school.
- 10a. Large playground adjoining building, portion only was paved, now paved all over. Another large playground opposite ; covered-in shelter in the former.

Number of children inspected, 72.

Absent on day of inspection, *nil*.

Height and weight of children at various ages :—

Age	12-13	13-14	14-15
Number inspected	45	23	4
Average height in inches ..	55	56½	59½
Average height in centimeters	139.7	143.5	151.1
Standard height in inches ..	54.9	56.9	59.3
Standard height in centimeters	139.4	144.5	150.6
Average weight in lbs... ..	71¾	77½	85¼
Average weight in kilogrammes	32.5	35.1	38.7
Standard weight in lbs. ..	76.7	82.6	92.0
Standard weight in kilogrammes	34.8	37.5	41.7

NUMBER AND PERCENTAGE OF DEFECTS FOUND.

Schedule No.	No.	Per Cent.
4 Fair	15 ..	20.8
Poor	1 ..	1.3
7 Fair	6 ..	8.3
8a Nits	3 ..	4.0
Scurf	1 ..	1.3
Acne	1 ..	1.3
8b Fair	1 ..	1.3
9 Fair	15 ..	20.8
Poor	2 ..	2.7
Bad	7 ..	9.7
10 Rhinorrhea	1 ..	1.3
Chronic Rhinorrhea	1 ..	1.3
10a Enlarged	13 ..	18.0
10b Adenoids.. .. .	2 ..	2.7
10c Enlarged	9 ..	12.5
11 Slight Blepharitis	1 ..	1.3
12 Slight Strabismus	1 ..	1.3

Visual Acuity						Per cent.
	R.	6/9	..	5	..	6.9
		6/12	..	1	..	1.3
		6/18	..	4	..	5.5
	L.	6/9	..	4	..	5.5
		6/12	..	1	..	1.3
		6/18	..	4	..	5.5
13	Intermittent Ottorrhea	..	..	1	..	1.3
14	Right Throat Deafness	..	..	1	..	1.3
	Impaired..	..	..	1	..	1.3
16	Fair	..	..	2	..	2.7
	Dull	..	..	1	..	1.3
	Backward	..	..	1	..	1.3
17	Vigorous and Nervous..	..	..	1	..	1.3
	Double Mitral disease	..	..	1	..	1.3
18	Bronchitis	..	..	5	..	6.9
19	Dull	..	..	1	..	1.3
	Excitable	..	..	1	..	1.3
	Highly strung	..	..	1	..	1.3
21	Chest	..	..	1	..	1.3
	General	..	..	1	..	1.3
24	Pityriasis Versicolor	..	..	1	..	1.3
	Facial Eczema	..	..	1	..	1.3
	Long Prepuce	..	..	1	..	1.3
	Slight enlargement of Navel	..	..	1	..	1.3
	Old hip disease, cured	..	..	1	..	1.3
	Suffers from Biliousness	..	..	1	..	1.3

PERSONAL HISTORY, PREVIOUS INFECTIOUS ILLNESSES.

	Per cent.
Measles	59 .. 82
Whooping Cough	43 .. 59
Chicken Pox	22 .. 30
Scarlet Fever	7 .. 9.7
Diphtheria	3 .. 4.0
Not Vaccinated.. .. .	8 .. 11

LOVEWELL ROAD GIRLS'.

1. Lovewell Road, open, no high buildings in the near vicinity, good class cottage property and residential houses in neighbourhood.
2. Two Tobin tubes in each classroom, Boyle's ventilator in roof, fresh air inlets at back of radiators.
3. Natural :—from large windows ; Artificial :—incandescent gas.
4. Open fire places and hot water pipes ; only one stove and one radiator in each room, main room satisfactory, others cannot be sufficiently warmed.
5. Very good.
6. Eight trough closets, flushed automatically three times between 9 a.m. and 4.30 p.m. Separate water closet for teachers, all clean.
- 6a. Four stoneware wash basins on landing, additional basin for teachers and sink for caretaker.
7. Public supply, good and ample. Drinking fountain in playground, but water not turned on.
8. Scrubbed out three times per annum, viz. :—at Easter, August and Christmas vacations ; swept out every night.
9. Hot water pipes in cloakrooms ventilated by air inlet and flue from ceiling.
10. Large paved playground with covered in shelter.

Number of children inspected, 70.

Absent on day of inspection, 1.

Height and weight of children at various ages :—

Age	6-7	8-9	10-11	12-13	13-14	14-15
Number inspected	1	1	1	34	29	4
Average height in inches ..	48½	51	55¼	56	58¾	60¾
Average height in centimeters	123.1	129.5	140.3	142.2	149.2	154.3
Standard height in inches ..	42.8	46.6	51.0	55.6	57.7	59.8
Standard height in centimeters	108.7	118.3	129.5	141.2	146.5	151.9
Average weight in lbs... ..	47	60	62	71½	84	92¼
Average weight in kilogrammes	21.3	27.2	28.1	32.4	38.1	41.8
Standard weight in lbs. ..	41.7	52.1	62.0	76.4	87.2	96.7
Standard weight in kilogrammes	18.9	23.6	28.1	34.7	39.6	43.8

NUMBER AND PERCENTAGE OF DEFECTS FOUND.

Schedule No.						No.		Per cent.
4	Fair	..	..	..	..	3	..	4.2
7	Fair	..	..	..	..	3	..	4.2
	Very Poor	..	..	..	..	1	..	1.4
8a	Nits	..	..	..	..	13	..	18.5
	Scurf	..	..	..	..	2	..	2.8
9	Fair	..	..	..	..	18	..	25.7
	Poor	..	..	..	..	3	..	4.2
	Bad	..	..	..	..	6	..	8.5
10	Intermittent Rhinorrhea..	..	..	..	..	1	..	1.4
	Inflamed Throat ..	..	..	..	..	1	..	1.4
10a	Enlarged	..	..	..	..	26	..	37.1
10b	Adenoids	..	..	..	..	12	..	17.1
10c	Enlarged	..	..	..	..	12	..	17.1
	Tubercular Gland in Neck	..	..	..	..	1	..	1.4
11	Blepharitis	..	..	..	..	1	..	1.4
12	Convergent Strabismus	..	..	..	..	1	..	1.4
	Strabismus	..	..	..	..	1	..	1.4
	Corneal Nebula	..	..	..	..	1	..	1.4
	Iritis and Cataract	..	..	..	..	1	..	1.4
	Eyes of different colour ..	..	..	..	..	1	..	1.4
	Blind	..	..	..	..	1	..	1.4
	Visual Acuity	..	R 6/9	..	..	3	..	4.2
			6/12	..	..	2	..	2.8
			6/24	..	..	1	..	1.4

ABSENT FROM INSPECTION.

PERSONAL HISTORY, PREVIOUS INFECTIOUS ILLNESSES.

Measles	..	..	..	..	..	54	..	77
Whooping Cough	..	..	..	..	..	34	..	48
Chicken Pox	..	..	..	..	..	26	..	37
Scarlet Fever	..	..	..	..	..	6	..	8·5
Diphtheria	..	..	..	..	..	5	..	7·1
Not Vaccinated	..	..	..	..	..	9	..	12·8

LOVEWELL ROAD INFANTS'.

1. Lovewell Road, open, no high buildings in the near vicinity, good class cottage property and residential houses in neighbourhood.

2. Two Tobin tubes and one chimney ventilator in each class-room ; fresh air inlets at back of radiators.

3. Natural :—from large windows. Artificial :—incandescent gas, satisfactory, used so little.

4. Open fire-places and hot water pipes, satisfactory.

5. Very good.

6. Eight trough closets, flushed automatically three times between 9 a.m. and 4.30 p.m. Urinal for infant boys. All clean. Separate closet for teachers.

6a. Six stoneware wash basins adjoining cloakrooms and marching hall. Additional separate basin for teachers and sink for caretaker, all clean.

7. Public supply, good and ample. Drinking fountain in playground, but water not turned on.

8. Scrubbed out three times per annum, viz. :—at Easter, August and Christmas vacations ; swept out every night.

9. Hot water pipes in cloakrooms ventilated by air inlet and flue from ceiling.

10. Modern, up-to-date school.

10a. Large paved playground with covered-in shelter.

Number of children inspected, 87.

Absent on day of Inspection, 10.

Heights and weights of children at various ages :—

	Males.			Females.			
	4-5	5-6	6-7	4-5	5-6	6-7	7-8
Age	4-5	5-6	6-7	4-5	5-6	6-7	7-8
Number inspected	25	15	8	16	18	4	1
Average height in inches ..	40½	41¼	45	40¼	41½	43	46½
Average height in centimeters	102.8	104.7	114.3	102.2	105.4	109.2	118.1
Standard height in inches ..	—	41.0	44.0	—	40.5	42.8	44.4
Standard height in centimeters	—	104.1	111.7	—	102.8	108.7	112.7
Average weight in lbs. ..	36½	38¾	45	36¾	41½	40	44½
Average weight in kilogrammes	16.5	17.5	20.4	16.6	18.8	18.1	20.2
Standard weight in lbs. ..	—	39.9	44.4	—	39.2	41.7	47.5
Standard weight in kilogrammes	—	18.1	20.2	—	17.8	18.9	21.5

NUMBER AND PERCENTAGE OF DEFECTS FOUND.

Schedule. No.				Males.					Females.	
				No.	Per Cent.				No.	Per Cent.
4.	Fair	..	..	2	2.3	..			1	1.1
7.	Fair	..	..	7	8.0	..			1	1.1
8a.	Nits	..	..	4	4.5	..			4	4.5
	Scurf	..	..	1	1.1	..			1	1.1
8b.	Petechia	..	..	1	1.1	..			1	1.1
9.	Fair	..	..	8	9.1	..			8	9.1
	Poor	..	..	5	5.7	..				
	Bad	..	..	5	5.7	..			4	4.5
10.	Rhinitis	..	..	1	1.1					
	Intermittent Rhinorrhea	..			..	..			1	1.1
10a.	Enlarged	..	..	17	19.5	..			5	5.7
	Inflamed	..	..	..	..	..			1	1.1
10b.	Adenoids	..	..	11	12.6	..			3	3.4
10c.	Enlarged	..	..	16	18.3	..			4	4.5
11.	Blepharitis	..	..	1	1.1					
12.	Strabismus	..	..	1	1.1					
13.	Otorrhea	..	..	..	..	..			1	1.1
	Intermittent Otorrhea			4	4.5	..			2	2.3
14.	Dull	..	..	..	..	..			1	1.1
	Impaired	..	..	3	3.4	..			1	1.1
17.	Heart Sounds not pure			1	1.1	..				
18.	Bronchitis	..	..	7	8.0	..			6	6.8
21.	Chest	..	..	2	2.3					
22.	Left leg wasted	..		1	1.1					
23.	Skin rough and tongue peeled, typical Scarlet									
	Fever	..	..	..	..	..			1	1.1
24.	Facial Eczema	..		2	2.3	..			1	1.1
	Dermatitis on Face			1	1.1					
	Old Rupture, wears truss				..	..			1	1.1

ABSENT FROM INSPECTION.

	No.	Per cent.
Measles	3	3.4
Whooping Cough	3	3.4

	No.	Per Cent.
Pneumonia	I	1.1
Diseased Liver	I	1.1
Sickness	2	2.3

PERSONAL HISTORY, PREVIOUS INFECTIOUS ILLNESSES.

Measles	32	36
Whooping Cough	33	37
Chicken Pox	12	13
Scarlet Fever	4	4.5
Diphtheria	3	3.4
Not Vaccinated.. .. .	11	12.6

MORTON ROAD MIXED.

1. In Morton Road, open situation, good class of cottage property in neighbourhood.

2. Two Tobin tubes in each classroom, Boyle's ventilator in roof, fresh air inlets at back of radiators ; there is also an open fireplace.

3. Natural :—From large windows. Artificial :—Incandescent gas, no complaints of same.

4. Open fireplaces and hot water pipes.

5. Very good.

6. Four trough water closets and large urinal for boys with automatic flush. There are also separate closets for teachers ; all clean.

6a. Six stoneware washbasins in two cloakrooms, also separate washbasin for teachers and stoneware sink for caretaker.

7. Company's water good, supply runs short on summer afternoons. There is a drinking fountain in playground and six enamelled mugs are kept in cloakrooms for children's use.

8. Swept down every night and scrubbed out at Easter, August and Christmas vacations.

9. Hot water pipes in cloakrooms with an air upcast for carrying off moisture.

10. Modern type of school, up-to-date and in good order.

10a. Large paved playground with covered-in shelter. The girls do not use either this playground or water closets.

Number of children inspected, 101.

Absent on day of Inspection, *nil*.

Height and weight of children at various ages :—

	Males.						Females.					
	7-8	8-9	9-10	11-12	12-13	13-14	8-9	9-10	10-11	11-12	12-13	13-14
Age .. ..	..	..	..	..	..	..	..	..	..	..	..	..
Number inspected	1	6	4	3	17	17	1	3	3	9	13	24
Average height in inches ..	45 $\frac{3}{4}$	49 $\frac{1}{4}$	48 $\frac{1}{2}$	54 $\frac{1}{2}$	56 $\frac{1}{4}$	58	49 $\frac{1}{2}$	50 $\frac{1}{2}$	51	52 $\frac{1}{4}$	56 $\frac{1}{2}$	58
Average height in centimeters ..	115.2	125.1	123.2	138.4	142.8	147.3	125.7	128.2	129.5	132.7	143.5	147.3
Standard height in inches ..	45.9	47.0	49.7	53.5	54.9	56.9	46.6	48.7	51.0	53.1	55.6	57.7
Standard height in centimeters ..	116.5	119.3	126.2	135.9	139.4	144.5	118.3	123.7	129.5	134.8	141.2	146.5
Average weight in lbs... ..	49	56 $\frac{1}{2}$	54 $\frac{3}{4}$	68 $\frac{1}{2}$	76 $\frac{3}{4}$	83	57	56 $\frac{1}{2}$	61	63 $\frac{3}{4}$	74 $\frac{1}{2}$	81
Average weight in kilogrammes ..	22.2	25.6	24.8	31.0	34.8	37.6	25.9	25.6	27.7	28.9	33.8	36.7
Standard weight in lbs. ..	49.7	54.9	60.4	72.0	76.7	82.6	52.1	55.5	62.0	68.1	76.4	87.2
Standard weight in kilogrammes ..	22.5	24.9	27.4	32.7	34.8	37.5	23.6	25.1	28.1	30.8	34.7	39.6

NUMBER AND PERCENTAGE OF DEFECTS FOUND.

Schedule No.	Males.				Females.			
		No.	Per cent.		No.	Per cent.		
4.	Fair	10	9.9	.. ..	13	12.8		
	Poor	5	4.9	.. ..	3	2.9		
	Very Poor ..	3	2.9					
7.	Fair	3	2.9	.. ..	5	4.9		
	Poor	1	0.9					
8a.	Nits	1	0.9	.. ..	15	14.8		
	Scurf .. ..	..	..	.. ..	1	0.9		
8b.	Fair	1	0.9	.. ..	1	0.9		
9.	Fair	9	8.9	.. ..	16	15.8		
	Poor	2	1.9	.. ..	2	1.9		
	Bad	6	5.9	.. ..	4	3.9		
	Serrated ..	1	0.9					
	Serrated and Pegtopped ..	..	..	.. ..	1	0.9		
10.	Nasal Polypus	1	0.9					
10a.	Enlarged ..	11	10.8	.. ..	8	7.9		
10b.	Adenoids ..	8	7.9	.. ..	5	4.9		
10c.	Enlarged ..	15	14.8	.. ..	7	6.9		
11.	Blepharitis ..	1	0.9	.. ..	2	1.9		
12.	Visual Acuity							
	R. 6/9	1	0.9	..	R. 6/12	2	1.9	
	6/60	1	0.9	..	.. 6/18	1	0.9	
					6/24	1	0.9	
					6/36	1	0.9	
	L. 6/9	1	0.9	..	L. 6/12	3	2.9	
	6/60	1	0.9	..	.. 6/18	1	0.9	
	Blind from Stab	1	0.9	..	.. 6/24	1	0.9	
					6/60	1	0.9	
13.	Otorrhea ..	1	0.9	..				
	Intermittent Otorrhea	..	..	..	3	2.9		
14.	Impaired one side	1	0.9					
	Impaired both sides	1	0.9	.. ..	2	1.9		

15.	Lisp	I	0.9					
	Thick.. ..	..	..	..	..	I	0.9	
16.	Dull	I	0.9	..	..	5	4.9	
	Backward ..	I	0.9					
17.	Heart sounds not pure ..	2	1.9	..	..	3	2.9	
	Double Mitral Disease ..	I	0.9					
	Apex beat displaced ..	I	0.9					
18.	Bronchitis ..	..	..	..	..	2	1.9	
	Sounds rough ..	..	..	..	..	I	0.9	
19.	Highly Strung	I	0.9					
	Sensitive ..	..	..	..	..	I	0.9	
21.	Chest ..	I	0.9					
	Pigeon Breast	I	0.9					
	General ..	4	3.9					
22.	Lateral Scoliosis ..	..	..	..	..	I	0.9	
24.	Stoops slightly	I	0.9					
	Pityriasis Versicolor	I	0.9					
	Eczema, Facial	I	0.9					
	Dermatitis, Facial ..	..	..	..	..	I	0.9	
	Very high roof to mouth ..	..	..	..	..	I	0.9	
	Suffers from severe Uterine Hæmorrhage, excluded permanently ..	..	..	..	..	I	0.9	

PERSONAL HISTORY, PREVIOUS INFECTIOUS ILLNESSES.

Measles .. ..	..	..	..	..	82	..	81
Whooping Cough ..	..	..	..	..	47	..	46
Chicken Pox .. ..	..	..	..	..	35	..	34
Scarlet Fever .. ..	..	..	..	..	8	..	7.9
Diphtheria .. ..	..	..	..	..	6	..	5.9
Not Vaccinated.. ..	..	..	..	..	10	..	9.9

MORTON ROAD INFANTS AND JUNIORS.

1. In Morton Road. Open situation, good class of cottage property in neighbourhood.
2. Two Tobin tubes in each classroom, Boyle's ventilator in roof, and open fire places, one of which was blocked up; fresh air inlets at back of radiators.
3. Natural :—From large windows. Artificial :—Incandescent gas, no complaints of same.
4. Open fire places and hot water pipes.
5. Very good.
6. Eight trough water closets with automatic flush, separate closet for teachers.
- 6a. Five stoneware washbasins adjoining cloakrooms, separate basin for teachers and stoneware sink for caretaker.
7. Company's water, good and ample, cups and glasses for children's use to be obtained by applying to the teacher. Drinking fountain in playground.
8. Swept down every night. Scrubbed throughout at Easter, August and Christmas vacations,
9. Hot water pipes in cloakroom with an air upcast for carrying off moisture.
10. Modern type of school, up-to-date and in good order.
- 10a. Large playground, partly paved. Both the closets and playground are used by the girls from the mixed department.

Number of children inspected, 78.

Absent on day of inspection, 9.

Height and weight of children according to age:—

		Males.						Females.							
Age	.. .. .	3-4	4-5	5-6	6-7	7-8	8-9	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11
Number inspected	.. .. .	4	8	9	9	5	5	1	9	9	3	8	6	1	1
Average height in inches	.. .. .	36½	40	43¼	44½	46¼	46¾	35	38¾	41¾	43	47¼	47¼	47¼	47¾
Average height in centimeters	.. .. .	92.7	101.6	109.8	113.0	117.4	118.7	88.9	98.4	106.0	109.2	120.0	120.0	120.0	121.2
Standard height in inches	.. .. .	—	—	41.0	44.0	45.9	47.0	—	—	40.5	42.8	44.4	46.6	48.7	51.0
Standard height in centimeters	.. .. .	—	—	104.0	111.7	116.5	119.3	—	—	102.8	108.7	112.7	118.3	123.7	129.5
Average weight in lbs...	.. .. .	33¼	36¾	43½	45¼	49¾	50	30¾	35¾	39½	42	49¼	51½	48¾	52
Average weight in kilogrammes	.. .. .	15.1	16.6	19.7	20.5	22.5	22.7	13.9	16.2	17.9	19.1	22.3	23.3	23.1	23.6
Standard weight in lbs.	.. .. .	—	—	39.9	44.4	49.7	54.9	—	—	39.2	41.7	47.5	52.1	55.5	62.0
Standard weight in kilogrammes	.. .. .	—	—	18.1	20.2	22.5	24.9	—	—	17.8	18.9	21.5	23.6	25.1	28.1

NUMBER AND PERCENTAGE OF DEFECTS FOUND.

Schedule No.				Males.		Females	
				No.	Per cent.	No.	Per cent.
4.	Fair	..	..	3	3.8	5	6.4
	Poor	..	..	2	2.5		
7.	Fair	..	..	2	2.5	6	7.6
8a.	Nits	..	..	1	1.2	13	16.6
	Scurf	..	..	2	2.5		
8b.	Petechia	..	..	1	1.2		
	Fair	..	..	..	..	1	1.2
9.	Fair	..	..	7	8.9	15	19.2
	Poor	..	..	2	2.5	3	3.8
	Bad	..	..	4	5.1	3	3.8
10.	Nasal Polypus	..	..	..	..	1	1.2
	Granular Pharyngitis	..	..	..	..	1	1.2
	Inflamed throat	..	..	..	..	1	1.2
10a.	Enlarged	..	..	5	6.4	8	10.2
	Tonsillitis	..	..	..	..	1	1.2
10b.	Adenoids	..	..	3	3.8	3	3.8
10c.	Enlarged	..	..	10	12.8	8	10.2
11.	Injury, left eye	..	..	1	1.2		
12.	Conjunctivitis and Photophobia					1	1.2
	Strabismus	..	..	..	..	2	2.5
	Convergent Strabismus	..	..	..	..	1	1.2
	Visual Acuity	..		R.	6/9	2	20.0
					6/12	1	10.0
					6/18	1	10.0
					6/24	1	10.0
				L.	6/9	2	20.0
					6/12	2	20.0
					6/24	1	10.0
13.	Intermittent Otorrhea			3	3.8	2	2.5
14.	Impaired	..	..	4	5.1	1	1.2
15.	Not plain	..	..	..	..	1	1.2
	Nasal	..	..	..	..	2	2.5
16.	Deficient	..	..	1	1.2		

Schedule No.					Males.		Females.		
					No.	Per cent.	No.	Per cent.	
18.	Chronic Bronchitis and slight Pleurisy ..				1	1·2			
	Chronic Bronchitis				1	1·2			
	Bronchitis				2	2·5			
21.	Chest				4	5·1	..	1	1·2
22.	Lost one finger ..				1	1·2			
23.	Impetigo				1	1·2			
	Ringworm				1	1·2			
24.	Dermatitis				1	1·2			

ABSENT FROM INSPECTION.

						No.	Per cent.	
Measles .. .. .	..	..	..	..	..	3	..	3.8
Scabies .. .. .	..	..	..	..	..	1	..	1.2
Pneumonia .. ..	..	..	..	..	..	1	..	1.2
Ringworm .. ..	..	..	..	..	..	1	..	1.2
Cold .. .. .	..	..	..	..	..	1	..	1.2
Whooping Cough	..	..	..	..	..	1	..	1.2
Without cause ..	..	..	..	..	..	1	..	1.2

PERSONAL HISTORY, PREVIOUS INFECTIOUS ILLNESSES.

Measles .. .. .	..	..	..	..	..	42	..	53
Whooping Cough	..	..	..	..	..	40	..	51
Chicken Pox .. ..	..	..	..	..	..	20	..	25
Scarlet Fever .. ..	..	..	..	..	..	3	..	3.8
Not Vaccinated..	..	..	..	..	..	9	..	11.5

Voluntary Schools.

CENTRAL BOYS.

1. Infirmary Plain. Originally a small Hospital at north end of town, partly surrounded by poor cottage property.
2. Upper portion of windows fall inwards ; open fireplaces.
3. Natural :—From windows. Artificial :—Electric.
4. Open fireplaces and closed iron stoves.
5. Old, long desks with no backs, to seat from 4 to 10 children, are about 20 years old, want replacing.
6. Three water closets and separate one for teacher, with proper flushing apparatus. Three urinals, all clean.
- 6a. One washbasin in porch, clean.
7. Public water supply ; good and ample. Stoneware sink and tap in porch.
8. Floors swept down every night. Scrubbed out and cleaned four times a year. Ceilings and walls very clean, recently done.
9. None, except fireplace in teachers' room.
10. Desks cause stooping. Light fairly good, arranged in best manner possible. One very dull corner, also cold in winter.
- 10a. Very small piece of gravelled playground. Children invariably play on St. Margaret's Plain under supervision of teacher. What small piece of playground there is should be paved. Door opens inward and is situated right on the path of the public street. Other doors open outward.

Number of children inspected, 44.

Absent on day of inspection, 1.

Height and weight of children at various ages :—

Age	10-11	11-12	12-13	13-14	14-15
Number inspected	1	4	15	23	1
Average height in inches ..	51½	54½	55½	57	58½
Average height in centimeters	130.8	137.4	140.1	144.7	147.3
Standard height in inches ..	51.8	53.5	54.9	56.9	59.3
Standard height in centimeters	131.5	135.9	139.4	144.5	150.6
Average weight in pounds ..	71½	69¼	73¼	78¼	92
Average weight in kilogrammes	32.4	31.4	33.2	35.5	41.7
Standard weight in pounds ..	67.5	72.0	76.7	82.6	92.0
Standard weight in kilogrammes	30.6	32.7	34.8	37.5	41.7

NUMBER AND PERCENTAGE OF DEFECTS FOUND.

Schedule No.		No.	Per cent.
4	Fair	8	18.1
	Poor	1	2.2
7	Fair	2	4.5
	Very thin	1	2.2
8b	Fair	1	2.2
9	Fair	8	18.1
	Poor	1	2.2
	Bad	1	2.2
10a	Enlarged	9	20.4
10b	Adenoids	7	15.9
10c	Enlarged	10	22.7
11	Blepharitis	1	2.2
12	Visual Acuity		
	R. 6/12	4	9.0
	6/18	2	4.5
	6/24	1	2.2
	6/60	1	2.2
	L. 6/12	4	9.0
	6/18	2	4.5
	6/60	1	2.2
13	Otorrhea	1	2.2
14	Impaired	5	11.3
15	Thick	1	2.2
16	Weak	1	2.2
	Defective	1	2.2
22	Prominent Chest	3	6.8
	Pigeon Breast	1	2.2
	Lumbar Kyphosis	1	2.2

24	Pityriasis Versicolor	..	..	..	I	..	2.2
	Facial Eczema	2	..	4.5
	Septic Toe	I	..	2.2

ABSENT FROM INSPECTION.

At School Treat	I	..	2.2
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PERSONAL HISTORY, PREVIOUS INFECTIOUS ILLNESSES

Measles	33	..	75
Whooping Cough	16	..	36
Chicken Pox	8	..	18
Scarlet Fever	6	..	13
Diphtheria	2	..	4.5

Not Vaccinated..	6	..	13
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CENTRAL GIRLS.

1. Infirmary Plain. Originally a small Hospital at north end of town, partly surrounded by poor cottage property.
2. Upper portion of windows fall inwards ; open fireplaces.
3. Natural :—From windows. Artificial :—Electric.
4. Open fireplaces and two closed iron stoves.
5. Desks very old ; 4, 5 and 6 seaters.
6. Five water closets and separate one for teachers, all fitted with proper flushing apparatus.
- 6a. One wash basin in cloakroom.
7. Public water supply, good and ample.
8. Floors swept every night. Scrubbed out and cleaned four times a year.
9. None, except fireplaces in teachers' room.
10. Arranged in best possible manner for lighting, no backs to desks.

10a. Small gravelled playground, this should be paved. Door at foot of stairs opens inward and is situated right on the path of the public street. An emergency staircase for fire purposes has been erected outside the building, but another staircase for ordinary exit is required, as there is only one small outlet for every child in the school.

Number of children inspected, 53.

Absent on day of inspection, 2.

Height and weight of children at various ages :—

Age	6-7	7-8	8-9	10-11	12-13	13-14	14-15
Number inspected	3	1	1	1	22	21	4
Average height in inches ..	41½	46¼	39¼	58	55¼	58¼	61
Average height in centimeters	105.4	117.4	99.7	147.3	140.3	147.9	154.9
Standard height in inches ..	42.8	44.4	46.6	51.0	55.6	57.7	59.8
Standard height in centimeters	108.7	112.7	118.3	129.5	141.2	146.5	151.9
Average weight in pounds ..	41½	46¾	52	84	74	83¾	98½
Average weight in kilogrammes	18.8	21.2	23.6	38.1	33.6	37.9	44.7
Standard weight in pounds ..	41.7	47.5	52.1	62.0	76.4	87.2	96.7
Standard weight in kilogrammes	18.9	21.5	23.6	28.1	34.7	39.6	43.8

NUMBER AND PERCENTAGE OF DEFECTS FOUND.

Schedule No.	No.	Per cent.
4 Poor	I ..	1.8
7 Fair	I ..	1.8
8a Nits	II ..	20.7
Scurf	I ..	1.8
8b Lice	I ..	1.8
9 Fair	IO ..	18.8
Poor	2 ..	3.7
10a Enlarged	IO ..	18.8
10b Adenoids	4 ..	7.5
10c Enlarged	13 ..	24.5
11 Styne	I ..	1.8
12 Strabismus	I ..	1.8
Visual Acuity R. 6/9	3 ..	5.6
6/12	2 ..	3.7
6/60	I ..	1.8
L. 6/9	I ..	1.8
6/12	I ..	1.8
6/36	I ..	1.8
Blind	I ..	1.8
14 Throat deafness	I ..	1.8
Impaired	I ..	1.8
15 Lisp	I ..	1.8
16 Fair	2 ..	3.7
Dull	I ..	1.8

Schedule No.		No.	Per cent.
17	Heart sounds not pure	1 ..	1·8
	Systolic murmur at left base	1 ..	1·8
23	Impetigo	1 ..	1·8
24	Left breast enlarged	1 ..	1·8
	Night Terrors	1 ..	1·8
	Headaches from old injury to frontal bone	1 ..	1·8
	Abscess of eyelid	1 ..	1·8

ABSENT FROM INSPECTION.

St. Vitus Dance	1 ..	1·8
Measles	1 ..	1·8

PERSONAL HISTORY, PREVIOUS INFECTIOUS ILLNESSES.

Measles	40 ..	75
Whooping Cough	29 ..	55
Chicken Pox	14 ..	26
Scarlet Fever	5 ..	9·4
Diphtheria	1 ..	1·8
Not Vaccinated.. .. .	5 ..	9·4

CUNNINGHAM GIRLS.

1. High Street, right on top of the main road with a constant tram (double line) and other traffic. Road paved with granite blocks, incessant noise all day. Good class of property in front, at back fair class of cottages. A one story building.
2. Six Tobin tubes in main class room. Other room by windows and doors. The walls of the latter are damp.
3. Natural :—From windows which are all frosted. Artificial :—Was ordinary gas, incandescent burners now fitted.
4. Open fireplaces, two in main room and one in other room. Insufficient in cold weather.
5. All old fashioned desks without backs. Some are now altered in slope.
6. Three water closets fitted with proper flushing apparatus. Separate closet for teachers.

6a. One enamelled wash basin in porch and one stoneware sink.

7. Public supply, good and ample.

8. Swept down every night, scrubbed and cleaned at Easter, August and Christmas vacations.

9. None at all.

10. Arranged very well for lighting, upper sashes of windows might, with advantage, have plain glass substituted for frosted as at present. Door opens inward, on to main street but is always kept open during school hours.

10a. Small gravelled playground, requires paving all over.

Number of children inspected, 46.

Absent on day of inspection, *nil*.

Height and weight of children at various ages :—

Age	6-7	8-9	9-10	10-11	11-12	12-13	13-14	14-15
Number inspected	4	3	2	1	2	11	22	1
Average height in inches ..	42½	48	51	56	51¾	58	58	59
Average height in centimeters	107.9	121.9	129.5	142.2	131.4	147.3	147.3	149.8
Standard height in inches ..	42.8	46.6	48.7	51.0	53.1	55.6	57.7	59.8
Standard height in centimeters	108.7	118.3	123.7	129.5	134.8	141.2	146.5	151.9
Average weight in pounds ..	37½	49½	61½	81	62	81¼	81¾	98
Average weight in kilogrammes	17.0	22.4	27.9	36.7	28.1	36.8	37.0	44.5
Standard weight in pounds ..	41.7	52.1	55.5	62.0	68.1	76.4	87.2	96.7
Average weight in kilogrammes	18.9	23.6	25.1	28.1	30.8	34.7	39.6	43.8

NUMBER AND PERCENTAGE OF DEFECTS FOUND.

Schedule No.	No.	Per cent.
4 Fair	I ..	2·I
7 Fair	2 ..	4·3
8 Fair	I ..	2·I
8a Nits	II ..	23·9
Scurf	I ..	2·I
Dry Seborrhea	I ..	2·I
9 Fair	7 ..	15·2
Poor	3 ..	6·5
Bad	I ..	2·I
Gum Polypi	I ..	2·I

Schedule No.					No.	Per cent.
10a	Enlarged	..	..	..	12	26.0
10b	Adenoids	..	..	..	8	17.3
10c	Enlarged	..	..	..	11	23.9
11	Blepharitis	..	..	..	4	8.7
12	Nystagmus	..	..	..	1	2.1
	Pupils unequal	..	..	..	1	2.1
	Visual Acuity	R.	$\frac{6}{9}$	..	3	6.5
			$\frac{6}{12}$	..	2	4.3
			$\frac{6}{36}$	..	1	2.1
		L.	$\frac{6}{9}$	..	3	6.5
			$\frac{6}{12}$	..	3	6.5
13	Intermittent Otorrhea	..	..	..	1	2.1
14	Impaired	..	..	..	1	2.1
16	Fair	..	..	..	2	4.3
17	Heart sounds not pure	..	..	..	1	2.1
18	Harsh breathing	..	..	..	1	2.1
21	Chest	..	..	..	1	2.1
22	Marked Dorsal Kyphosis	..	..	..	1	2.1
24	Capillary Nevus	..	..	..	1	2.1

PERSONAL HISTORY, PREVIOUS INFECTIOUS ILLNESSES.

Measles	..	..	..	..	34	73
Whooping Cough	..	..	..	..	25	54
Chicken Pox	..	..	..	..	19	41
Scarlet Fever	..	..	..	..	8	17
Diphtheria	..	..	..	..	3	6.5
Not Vaccinated	..	..	..	..	5	10.8

ST. PETER'S INFANTS.

1. North end of town, Clapham Road, fairly open, at corner of street. A one story building containing one large and one small rooms.

2. By windows on both sides and end and extractor in roof. No ground ventilation.

3. Natural :—From windows, quite sufficient, except in small room, where another window is required. Artificial :—Incandescent gas.

4. In large room by an open stove and one closed stove in centre of room. In small room by an open stove.

5. Desks all have backs.

6. Three trough pedestal closets flushed four times daily, required painting, etc., which has now been done. Four urinals, clean.

6a. Two washbasins, fixed outside, with tap over. Very old fashioned and require painting and doing up.

7. Company's water, good and sufficient.

8. Floors swept nightly, cleaned weekly, scrubbed out and desks washed four times yearly.

9. Enclosed stove in cloak room. One cloak room was very neglected, the walls were covered with mildew, has been painted and overhauled.

10. There is no playground, but an open space belonging to a private individual is used as such under the supervision of the teachers. This land is quite open to the street and would make an excellent playground if enclosed.

Number of children inspected, 58,

Absent on day of inspection, 2.

Height and weight of children at various ages :—

	Males.			Females.			
	4-5	5-6	6-7	4-5	5-6	6-7	7-8
Age	4-5	5-6	6-7	4-5	5-6	6-7	7-8
Number inspected	19	13	3	17	3	2	1
Average height in inches ..	41	41½	41¾	39¾	41½	43	43¾
Average height in centimeters	104.1	105.4	106.0	100.9	105.4	109.2	111.1
Standard height in inches ..	—	41.0	44.0	—	40.5	42.8	44.4
Standard height in centimeters	—	104.1	111.7	—	102.8	108.7	112.7
Average weight in pounds ..	37¼	39¾	38¼	37½	37¾	39½	39
Average weight in kilogrammes	16.9	18.0	17.3	17.0	17.1	17.9	17.7
Standard weight in pounds ..	—	39.9	44.4	—	39.2	41.7	47.5
Standard weight in kilogrammes	—	18.1	20.2	—	17.8	18.9	21.5

NUMBER AND PERCENTAGE OF DEFECTS FOUND.

Schedule No.	Males.				Females.			
		No.	Per cent.		No.	Per cent.		
4.	Fair	4	6.8 ..	..	5	8.6		
	Poor	1	1.7 ..	..	1	1.7		
7.	Fair	2	3.4 ..	..			
8.	Fair	1	1.7 ..	..	2	3.4		
8a.	Nits	1	1.7 ..	..	4	6.8		
9.	Fair	8	13.7 ..	..	3	5.1		
	Poor	1	1.7 ..	..	5	8.6		
	Bad	4	6.8 ..	..	1	1.7		
10.	Rhinorrhea ..	1	1.7 ..	..	5	8.6		
	Nasal Catarrh ..	..	.. ..	..	1	1.7		
	Post Pharyngeal Catarrh ..	..	.. ..	..	1	1.7		
10a.	Enlarged ..	9	15.5 ..	..	5	8.6		
10b.	Adenoids ..	4	6.8 ..	..	4	6.8		
10c.	Enlarged ..	10	17.2 ..	..	5	8.6		
11.	Left Blepharitis ..	..	.. ..	..	1	1.7		
12.	Eyes of different colour ..	1	1.7					
13.	Intermittent Otorrhea ..	1	1.7 ..	..	3	5.1		
14.	Impaired ..	1	1.7					
15.	Stammers with facial contortion			..	1	1.7		
17.	Heart sounds not pure ..	1	1.7					
18.	Bronchitis ..	2	3.4 ..	..	4	6.8		
21.	Chest ..	1	1.7					
	General ..	1	1.7					
24.	Right Inguinal Hernia ..	1	1.7					
	Inward Rupture	1	1.7					
	Scabby Chin	1	1.7					
	Eczema on Chest	1	1.7		
	Pityriasis Versicolor		1	1.7		

ABSENT FROM INSPECTION.

Without cause	2	3.4
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PERSONAL HISTORY, PREVIOUS INFECTIOUS ILLNESSES.

Measles	42	72
Whooping Cough	27	46
Chicken Pox	..	..	..	..	..	17	29
Scarlet Fever	..	..	..	..	..	3	5.1
Diphtheria	..	..	..	..	..	1	1.7
Not Vaccinated	..	..	..	..	..	4	6.8

ST. ANDREW'S INFANTS.

1. West end of town, Haward Street, on high ground ; a one story building, good class of property in near neighbourhood.

2. By windows in all four walls and two extractors in roof.

3. Natural :—From windows, very good. Artificial :—Electric, very good.

4. Two open fire places in large room, insufficient in cold weather, the centre part being screened off does not receive any heat. An oil stove has since been added.

5. Some of the desks are without backs.

6. Seven open pedestal closets over common trough, wooden seats unvarnished, only flushed once a day during the morning, insufficient, cleaned down nightly. An open cement trough urinal, concrete in bad state, wants repairing.

6a. One wash basin in each cloakroom with tap over, clean.

7. Company's water, good and sufficient.

8. Floors swept nightly, cleaned down weekly, scrubbed four times yearly. Cloak room floors are washed nightly.

9. None except fires in schoolrooms.

10. The cloakrooms are not large enough to hold all the children's clothes, the surplus cloaks are hung in the class room, the bad smell from these clothes makes the room stuffy. This could be remedied by fixing a horse down the middle of the cloak rooms.

10a. There is a fairly large playground but is unpaved, is very dusty in dry weather and muddy in wet weather ; requires paving.

Number of children inspected, 52.

Absent on day of inspection, *nil*.

Height and weight of children at various ages :—

	Males.					Females.				
	3-4	4-5	5-6	6-7	7-8	3-4	4-5	5-6	6-7	7-8
Age										
Number inspected	2	4	8	3	5	3	12	10	3	2
Average height in inches	39	40½	41½	44½	47	38	38¾	41¾	43½	45½
Average height in centimeters..	99.0	102.8	105.4	113.0	119.3	96.5	98.4	106.0	110.5	115.5
Standard height in inches	—	—	41.0	44.0	45.9	—	—	40.5	42.8	44.4
Standard height in centimeters	—	—	104.1	111.7	116.5	—	—	102.8	108.7	112.7
Average weight in pounds	34¾	35	36¾	46¾	44¾	31	33	38	41	40½
Average weight in kilogrammes	15.7	15.9	16.9	21.2	20.3	14.1	15.0	17.2	18.6	18.3
Standard weight in pounds	—	—	39.9	44.4	49.7	—	—	39.2	41.7	47.5
Standard weight in kilogrammes	—	—	18.1	20.2	22.5	—	—	17.8	18.9	21.5

NUMBER AND PERCENTAGE OF DEFECTS FOUND.

Schedule No.					Males.				Females.	
					No.	Per cent.			No.	Per cent.
4.	Fair	..	..	..	5	9.6	..	14	26.9	
	Poor	..	..	..	1	1.9	..			
7.	Fair	..	..	..	5	9.6	..	11	21.1	
	Poor	..	..	..	1	1.9	..	1	1.9	
	Thin	..	..	..	1	1.9				
8.	Fair	..	..	..	1	1.9	..	3	5.7	
8a.	Fair	..	..	..	..	..	..	1	1.9	
	Nits	..	..	..	..	..	..	7	13.4	
9.	Fair	..	..	..	1	1.9	..	2	3.8	
	Poor	..	..	..	..	..	..	1	1.9	
	Bad	..	..	..	..	..	..	2	3.8	
10.	Rhinitis	..	..	..	1	1.9				
	Excoriated	..	..	..	..	..	..	1	1.9	
10a.	Enlarged	..	..	..	3	5.7	..	4	7.6	
10b.	Adenoids	..	..	..	4	7.6	..	2	3.8	
10c.	Enlarged	..	..	..	7	13.4	..	3	5.7	
11.	Blepharitis	..	..	..	1	1.9				
	Ulcers of Cornea	..	..	..	..	..	..	1	1.9	
12.	Strabismus	..	..	..	1	1.9				
	Right Internal Strabismus					..	..	1	1.9	
13.	Intermittent Otorrhea				1	1.9	..	3	5.7	
	Otorrhea	..	..	..	..	..	..	1	1.9	
14.	Deaf at times	..	..	..	1	1.9				
16.	Deficient	..	..	..	1	1.9				
18.	Bronchitis	..	..	..	1	1.9				
19.	Highly Strung	..	..	..	..	..	..	1	1.9	
21.	Chest	..	..	..	2	3.8	..	3	5.7	
22.	Old abscess of Hip, healed, left leg short							1	1.9	
23.	Ringworm	..	..	..	2	3.8				
24.	Facial Eczema	..	..	..	1	1.9				
	Prominent Abdomen				1	1.9				
	Sore Chin	..	..	..	1	1.9				

PERSONAL HISTORY, PREVIOUS INFECTIOUS ILLNESSES.

Measles .. ..	..	..	..	31	59
Whooping Cough .. ..	..	..	..	26	50

Chicken Pox	..	..	..	..	..	9	17
Scarlet Fever	..	..	..	..	..	2	3.8
Diphtheria ..	..	..	..	..	..	1	1.9
Not Vaccinated	..	..	..	..	..	4	7.6

MARINERS' SCORE MIXED.

1. East end of town, Mariners' Score, at the bottom of the cliff. Open at east and west. A one story building.

2. By windows, doors and louvred skylight.

3. Natural :—From windows. Artificial :—Ordinary gas, not satisfactory.

4. Two stoves, not sufficient.

5. All old fashioned desks without backs, seven in a row, 50 to 60 years old, cannot do with duals or singles, not sufficient room. The tops of the desks are very rough, they were either made without a plane or the soft wood has worn away, probably the latter, children's hands are protected by pieces of millboard when writing.

6. Two water closets for girls and three for boys, with separate flush. Urinal, with flush, for boys.

6a. One wash basin in each porch which are used as cloak rooms.

7. Company's water, good and sufficient.

8. Swept out nightly. Scrubbed and cleaned at Whitsun, Midsummer and Christmas vacations. Cloak room for girls too small, cannot be kept clean, tap of water over sink in corner. Boys' lobby small but has to accommodate a portion of the girls' cloaks.

9. None.

10. There are no windows in the north end of the school. The level of the Score on the outside is higher than the floor of the school. There is a small unpaved playground for boys but none for girls. The latter play on the pickling plots on the Denes which are partly paved.

This school has been condemned by the Board of Education, and is not to be used after a certain date. Attempts to save the building by the Church have proved unavailable.

Number of children inspected, 38.

Absent on day of Inspection, *nil*.

Height and weight of children at various ages:—

	Males.		Females.		
	12-13	13-14	12-13	13-14	14-15
Age	12-13	13-14	12-13	13-14	14-15
Number inspected	2	11	6	18	1
Average height in inches ..	58	55	55	57 $\frac{1}{4}$	60 $\frac{1}{2}$
Average height in centimeters	147.3	139.7	139.7	145.4	153.6
Standard height in inches	54.9	56.9	55.6	57.7	59.8
Standard height in centimeters	139.4	144.5	141.2	146.5	151.9
Average weight in pounds ..	85	71 $\frac{1}{2}$	70	75 $\frac{1}{4}$	101
Average weight in kilogrammes	38.6	32.4	31.8	34.1	45.8
Standard weight in pounds ..	82.6	92.0	76.4	87.2	96.7
Standard weight in kilogrammes	34.8	37.5	34.7	39.6	43.8

NUMBER AND PERCENTAGE OF DEFECTS FOUND.

Schedule No.	Males.		Females.	
	No.	Per cent.	No.	Per cent.
4. Fair	5	13.1	1	2.6
7. Fair .. .. .	..	..	1	2.6
Poor .. .. .	..	..	1	2.6
Thin	1	2.6	..	..
8. Fair	1	2.6	1	2.6
8a. Nits .. .. .	..	..	10	26.3
8b. Petechia	1	2.6	..	..
Dirty .. .. .	..	..	1	2.6
9. Fair	2	5.2	2	5.2
Poor	1	2.6	3	7.8
Bad	1	2.6	..	..
Crowded .. .. .	..	..	2	5.2
10. Chronic Laryngitis ..	..	..	1	2.6
10a. Enlarged	1	2.6	8	21.0
10b. Adenoids .. .. .	..	..	4	10.5
10c. Enlarged .. .. .	..	..	4	10.5
11. Blepharitis .. .. .	..	..	1	2.6
12. Strabismus .. .. .	..	..	1	2.6

Schedule No.	Males.				Females.			
	Visual Acuity	R.	No.	Per cent.	Visual Acuity	L.	No.	Per cent.
			6/12	I	2.6	6/9	2	5.2
						6/12	2	5.2
						6/24	2	5.2
			6/12	I	2.6	6/9	I	2.6
						6/12	2	5.2
						6/18	I	2.6
						6/24	I	2.6
14.	Slightly Impaired	..	..	..	..	I	2.6	
17.	Mitral Bruit	..	..	..	..	I	2.6	
18.	Harsh breathing at left base	..	..	..	..	I	2.6	
20.	Coughs up blood	..	..	..	..	I	2.6	

PERSONAL HISTORY, PREVIOUS INFECTIOUS ILLNESSES.

	No.	Per cent.
Measles	31	81
Whooping Cough	16	42
Chicken Pox	7	18
Scarlet Fever	8	21
Diphtheria	1	2.6
Not Vaccinated.. .. .	4	10.5

WILDE'S BOYS.

1. East end of town, on slope of hill. Quite open to healthy east wind, buildings on north and south sides, garden on west side, a one story building.

2. By doors, windows and lantern roof. Well ventilated and lofty.

3. Natural :—Windows. Artificial :—Incandescent and ordinary gas, not satisfactory.

4. Open fire places and a tortoise stove.

5. Only a portion of desks have backs, the front of the rear desks forming the backs for those in front. All old fashioned, six in a row, have been in use twenty years, are in good order.

6. Four trough water closets, are flushed three times between 9 a.m. and 4.30 p.m., clean. A wall urinal, with flush, in yard.

6a. One wash basin in lobby, modern and clean. At least one more is required in another lobby. This can conveniently be done when the playground is paved.

7. Company's water, good and ample supply. There is a tap near the washbasin, and one in yard for drinking purposes, the latter coming direct from a covered tank.

8. Swept down every night, scrubbed and cleaned out at Easter, Whitsun, Midsummer and Christmas vacations.

9. None at all.

10. Arranged in best manner possible for light, etc.

10a. Large playground with open shelter at near end. Requires paving and steps repairing. This latter has been promised by the Trustees, and it is expected will be carried out during summer holidays of 1910.

Number of children inspected, 64.

Absent on day of Inspection, 4.

Height and weight of children at various ages :—

Age	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15
Number inspected	1	1	1	2	4	27	27	1
Average height in inches ..	47 $\frac{1}{4}$	51 $\frac{1}{2}$	50 $\frac{1}{4}$	53 $\frac{3}{4}$	53	55 $\frac{1}{4}$	55 $\frac{1}{2}$	56 $\frac{1}{2}$
Average height in centimeters	120.0	130.8	127.0	136.5	134.6	140.3	140.9	143.5
Standard height in inches ..	45.9	47.0	49.7	51.8	53.5	54.9	56.9	59.3
Standard height in centimeters	116.5	119.3	126.2	131.5	135.9	139.4	144.5	150.6
Average weight in pounds ..	49 $\frac{1}{2}$	67 $\frac{1}{2}$	60 $\frac{1}{2}$	63 $\frac{3}{4}$	66 $\frac{1}{2}$	73 $\frac{3}{4}$	73 $\frac{1}{4}$	77 $\frac{1}{2}$
Average weight in kilogrammes	22.4	30.6	27.4	28.9	30.1	33.4	33.2	35.1
Standard weight in pounds ..	49.7	54.9	60.4	67.5	72.0	76.7	82.6	92.0
Standard weight in kilogrammes	22.5	24.9	27.4	30.6	32.7	34.8	37.5	41.7

NUMBER AND PERCENTAGE OF DEFECTS FOUND.

Schedule No.	No.						Per cent.
4 Fair	22	34.3
Poor	4	6.2
Bad	1	1.5

Schedule No.						No.		Per cent.
7	Fair	..	..	..	..	4	..	6.2
	Poor	..	..	..	..	1	..	1.5
	Thin	..	..	..	..	2	..	3.1
8	Fair	..	..	..	..	4	..	6.2
8a	Fair	..	..	..	..	2	..	3.1
	Nits	..	..	..	..	3	..	4.7
8b	Petechia	..	..	..	..	1	..	1.5
9	Fair	..	..	..	..	16	..	25.0
	Poor	..	..	..	..	1	..	1.5
	Bad	..	..	..	..	2	..	3.1
	Crowded	..	..	..	..	1	..	1.5
10	Chronic Laryngitis	..	..	..	..	1	..	1.5
	Chronic Rhinorrhea	..	..	..	..	1	..	1.5
	Chronic Rhinorrhea and Laryngitis	..	..	..	..	1	..	1.5
10a	Enlarged	..	..	..	..	20	..	31.2
10b	Adenoids	..	..	..	..	5	..	7.8
10c	Enlarged	..	..	..	..	3	..	4.7
12	Strabismus	..	..	..	..	1	..	1.5
	Visual Acuity		R.	6/9	..	2	..	3.1
				6/18	..	2	..	3.1
				6/24	..	1	..	1.5
			L.	6/18	..	2	..	3.1
				6/24	..	1	..	1.5
14	Dull	..	..	..	..	1	..	1.5
16	Fair	..	..	..	..	2	..	3.1
	Backward	..	..	..	..	1	..	1.5
17	Heart sounds not pure	..	..	..	..	4	..	6.2
18	Harsh breathing left lung	..	..	..	..	1	..	1.5
20	Right Hip	..	..	..	..	1	..	1.5
	Doubtful	..	..	..	..	1	..	1.5
21	Chest	..	..	..	..	2	..	3.1
22	Head, Dolichocephalic type	..	..	..	..	1	..	1.5
	Ankylosed right hip, Lordosis	..	..	..	..	1	..	1.5
	Right Lateral Scoliosis	..	..	..	..	1	..	1.5
23	Scabies and Eczema	..	..	..	..	1	..	1.5
24	Furuncles on Neck	..	..	..	..	2	..	3.1
	Warts on hands and arms	..	..	..	..	2	..	3.1
	Pityriasis Versicolor	..	..	..	..	1	..	1.5

Left undescended Testicle	..	..	I	..	I·5
Birthmark on face	..	..	I	..	I·5
Worms	..	..	I	..	I·5

ABSENT FROM INSPECTION.

Under Medical Treatment	..	..	2	..	3·I
In Hospital	..	..	I	..	I·5
Without cause	..	..	I	..	I·5

PERSONAL HISTORY, PREVIOUS INFECTIOUS ILLNESSES.

	No.	Per cent.
Measles	47	73
Whooping Cough	27	42
Chicken Pox	14	22
Scarlet Fever	3	4·7
Not Vaccinated.. .. .	11	17

ST. JOHN'S BOYS.

1. South end of town, next St. John's Church. Good class of property in neighbourhood, fairly open. A one story building.

2. By doors, windows, and two lantern ventilators in roof.

3. Natural :—Windows and lanterns in roof. Artificial :—Ordinary gas, insufficient and pressure is bad ; requires re-lighting by electricity.

4. Two open fireplaces.

5. Old, six seater, desks with no backs. A few old ones with backs for smaller boys.

6. Four ancient trough closets, require renewing. Flushed four times during school hours. Cistern wants repairing. Glazed brick urinal against inner wall of school, no smell. Two windows from school overlook latrine yard.

6a. None at all.

7. Company's water, good and ample supply.

8. Scrubbed and cleaned out four times a year.

9. None at all.

10. Arranged in best manner possible for light.

10a. A fair sized playground but unpaved.
Number of children inspected, 29.
Absent on day of inspection, *nil*.

Height and weight of children at various ages :—

Age	8-9	10-11	11-12	12-13	13-14	15-16
Number inspected	4	1	3	9	11	1
Average height in inches ..	46½	53½	55½	54½	55¾	59
Average height in centimeters	118.1	135.9	140.9	138.4	141.5	149.8
Standard height in inches ..	47.0	51.8	53.5	54.9	56.9	62.2
Standard height in centimeters	119.3	131.5	135.9	139.4	144.5	150.6
Average weight in pounds ..	46¼	71	62	71	73½	75
Average weight in kilogrammes	21.0	32.2	28.1	32.2	33.3	34.0
Standard weight in pounds ..	54.9	67.5	72.0	76.7	82.6	92.0
Standard weight in kilogrammes	24.9	30.6	32.7	34.8	37.5	41.7

NUMBER AND PERCENTAGE OF DEFECTS FOUND.

Schedule No.						No.	Per cent.
4 Fair						3	10.3
7 Fair						4	13.4
Poor						4	13.4
9 Fair						5	17.1
Poor						1	3.4
Crowded						1	3.4
10a Enlarged						7	24.1
10b Adenoids						6	20.6
10c Enlarged						5	17.1
12 Visual Acuity	R.	6/9	..	..		3	10.3
		6/12	..	..		1	3.4
		6/18	..	..		1	3.4
	L.	6/9	..	..		2	6.9
		6/12	..	..		3	10.3
13 Otorrhea						1	3.4
Intermittent Otorrhea						4	13.4
15 Defective						1	3.4
16 Dull						1	3.4
Defective						2	6.9

Schedule No.		No.	Per cent.
19	Defective	1	3·4
22	Occipitofrontal, 19 inches, almost microcephalic.. .. .	1	3·4
	Very small and short	2	6·9
23	Impetigo	1	3·4
24	Dyspepsia	1	3·4
	Pityriasis Versicolor	1	3·4

PERSONAL HISTORY, PREVIOUS INFECTIOUS ILLNESSES.

	No.	Per cent.
Measles	22	75
Whooping Cough	20	69
Chicken Pox	12	41
Scarlet Fever	7	24
Diphtheria	1	3·4
Not Vaccinated.. .. .	4	13·4

ST. JOHN'S GIRLS AND INFANTS.

1. South end of town, next St. John's Church. Good class of property in neighbourhood, fairly open. A one story building.

2. By doors, windows, and two lantern ventilators in roof, not good. There is a probability of being either very stuffy or very cold in the winter.

3. Natural:—Windows and lanterns in roof. Artificial:—Ordinary gas, insufficient and pressure is bad; requires re-lighting by electricity.

4. Hot water pipes, and stove in smaller classroom; not sufficient in frosty weather. North classroom walls near floor are very discoloured, and a lamp has to be used first in one room and then in the other.

5. Old, six-seater, desks without backs.

6. Five modern trough closets with automatic flush and one, with separate flush, for teachers.

6a. Two enamelled iron washbasins, rather old. One tap broken.

7. Company's water, good and ample supply.

8. Scrubbed out four times a year. Walls swept down twice a year. Teacher states that another cleaning between summer and Christmas is very necessary.

9. None at all.

10. Arranged in best manner possible for light.

10a. Playground for boys also used by this department but at a different time.

GIRLS.

Number of children inspected, 38.

Absent on day of inspection, *nil*.

Height and weight of children at various ages :—

Age	8-9	9-10	10-11	11-12	12-13	13-14
Number inspected	3	1	2	6	18	8
Average height in inches ..	47½	52½	49½	53¾	55¾	58
Average height in centimeters	120.6	133.3	125.7	136.5	141.6	147.3
Standard height in inches ..	46.6	48.7	51.0	53.1	55.6	57.7
Standard height in centimeters	118.3	123.7	129.5	134.8	141.2	146.5
Average weight in pounds ..	47½	67	60	66	67¾	83¼
Average weight in kilogrammes	21.5	30.4	27.2	29.9	30.7	37.7
Standard weight in pounds ..	52.1	55.5	62.0	68.1	76.4	87.2
Standard weight in kilogrammes	23.6	25.1	28.1	30.8	34.7	39.6

INFANTS.

Number of children inspected, 12.

Absent on day of inspection, *nil*.

Height and weight of children at various ages :—

Age	Males.			Females.	
	3-4	4-5	6-7	4-5	5-6
Number inspected	1	3	1	5	2
Average height in inches ..	36	39½	41½	38¾	39¼
Average height in centimeters	91.4	100.3	105.4	98.4	99.6
Standard height in inches ..	..	..	44.0	..	40.5
Standard height in centimeters	..	..	111.7	..	102.8
Average weight in pounds ..	29	37	35	34½	32½
Average weight in kilogrammes	13.6	16.8	15.9	15.6	14.7
Standard weight in pounds ..	..	..	44.4	..	39.2
Standard weight in kilogrammes	..	..	20.2	..	17.8

NUMBER AND PERCENTAGE OF DEFECTS FOUND.

Schedule No.				Males.					Females.	
				No.	Per cent.				No.	Per cent.
4	Fair	..	..	I	2	..	2	..	4	
	Poor	..	..	..	..	..	I	..	2	
	Bad	..	..	..	..	..	I	..	2	
7	Fair	..	..	..	..	..	3	..	6	
	Poor	..	..	..	..	..	I	..	2	
8a	Nits	..	..	..	..	..	12	..	24	
8b	Fair	..	..	..	..	..	I	..	2	
	Dirty	..	..	..	..	..	I	..	2	
	Petechia	..	..	..	..	..	I	..	2	
9	Fair	..	..	..	..	..	9	..	18	
	Poor	..	..	..	..	..	I	..	2	
	Bad	..	..	..	..	..	4	..	8	
10	Rhinorrhea	..	..	..	..	..	I	..	2	
10a	Enlarged	..	..	..	..	..	11	..	22	
10b	Adenoids	..	..	..	..	..	4	..	8	
10c	Enlarged	..	..	..	..	..	6	..	12	
12	Strabismus	..	..	..	..	..	I	..	2	
	Convergent Strabismus	..	..	..	..	..	I	..	2	
	Spasm of Ciliary Muscle	..	..	..	..	..	I	..	2	
	Peculiar appearance	..	..	..	..	..	I	..	2	
	Visual Acuity	..	..	R.	6/12	..	3	..	6	
		..	..		6/18	..	3	..	6	
		..	..		6/60	..	I	..	2	
		..	..	L.	6/12	..	3	..	6	
		..	..		6/18	..	3	..	6	
		..	..		6/60	..	I	..	2	
13	Intermittent Otorrhea	..	..	..	..	..	I	..	2	
14	Slight defect right ear	..	..	..	..	..	I	..	2	
15	Defective	..	..	..	..	..	I	..	2	
	Stutter	..	..	..	..	..	I	..	2	
16	Dull	..	..	..	..	..	I	..	2	
	Defective	..	..	..	..	..	I	..	2	
17	Systolic Bruit	..	..	..	..	..	I	..	2	
22	Paralysed left arm and side	..	..	..	..	..	I	..	2	
	Slight stoop	..	..	..	..	..	I	..	2	
23	Chicken Pox	..	..	..	..	..	I	..	2	

Schedule No.		No.	Per cent.
24	Migraine	1	2
	Small Tumour above right eye ..	1	2

PERSONAL HISTORY, PREVIOUS INFECTIOUS ILLNESSES.

Measles	38	76
Whooping Cough	23	46
Chicken Pox	14	28
Scarlet Fever	8	16
Diphtheria	1	2
Not Vaccinated.. .. .	6	12

HERVEY STREET INFANTS.

1. West side of town, fairly good cottage property in near neighbourhood. A one story building.

2. By Tobin tubes, exhaust in roof, air grids in wall, and open windows.

3. Natural :—From windows. Artificial :—Electric light.

4. Hot water pipes heated by coke furnace in large classroom.

5. Old desks, without backs, to seat four ; insufficient.

6. Six trough closets with automatic flush. Four are in one row without partitions. An open urinal facing closets. All require re-organising, as there is no privacy whatever.

6a. Three old and dilapidated wash basins in very bad condition, were originally enamelled iron, require replacing.

7. Company's water, good and ample supply.

8. Scrubbed out three times a year.

9. None, except stoves in school, to which new guards are being provided.

10. Arranged in best manner for light.

10a. Large playground but only partly paved.

Number of children inspected, 42.

Absent on day of inspection, 1.

Height and weight of children at various ages :—

	Males.				Females.			
	3-4	4-5	5-6	7-8	3-4	4-5	5-6	6-7
Age	3-4	4-5	5-6	7-8	3-4	4-5	5-6	6-7
Number inspected	4	16	3	2	1	7	6	3
Average height in inches ..	38½	40¼	41¼	47¾	36	38¼	40¼	43½
Average height in centimeters	97.8	102.2	104.7	121.2	91.4	97.2	102.2	110.5
Standard height in inches ..	..	..	41.0	45.9	..	..	40.5	42.8
Standard height in centimeters	..	..	104.1	116.5	..	..	102.8	108.7
Average weight in pounds ..	35¾	36½	38½	49	30	33½	35½	41½
Average weight in kilogrammes	16.2	16.5	17.4	22.2	13.6	15.2	16.1	18.8
Standard weight in pounds ..	..	..	39.9	49.7	..	..	39.2	41.7
Standard weight in kilogrammes	..	..	18.1	22.5	..	..	17.8	18.9

NUMBER AND PERCENTAGE OF DEFECTS FOUND.

Schedule No.				Males.		Females.		Per cent.
				No.	Per cent.	No.	Per cent.	
4.	Fair	..	..	9	20.9	6	13.9	
	Bad	..	..	1	2.3	1	2.3	
7.	Fair	..	..	..	..	3	6.9	
8a.	Scurf	..	..	1	2.3	..		
	Nits	..	..	..	..	3	6.9	
8b.	Fair	..	..	..	..	1	2.3	
9.	Fair	..	..	6	13.9	4	9.3	
	Poor	..	..	1	2.3	..		
	Bad	..	..	1	2.3	1	2.3	
10a.	Enlarged	..	..	6	13.9	3	6.9	
10b.	Adenoids	..	..	3	6.9	1	2.3	
10c.	Enlarged	..	..	3	6.9	4	9.3	
13.	Otorrhea	..	..	1	2.3	..		
14.	Impaired	..	..	1	2.3	..		
15.	Thick	..	..	..	..	1	2.3	
16.	Dull	..	..	2	4.6	1	2.3	
18.	Moist sounds	..	..	1	2.3	..		
22.	Head very large	..	..	1	2.3	..		
	Flat Chest	..	..	1	2.3	..		
24.	Rupture	1	2.3	..		
	Right Inguinal		
	Hernia	1	2.3	..		

ABSENT FROM INSPECTION.

Without cause	I	2·3
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PERSONAL HISTORY, PREVIOUS INFECTIOUS ILLNESSES.

Measles	20	..	46
Whooping Cough	13	..	30
Chicken Pox	7	..	16
Not Vaccinated	3	..	6·9

CHRIST CHURCH INFANTS.

1. East end of town, at bottom of Score. Quite open on south side but surrounded by buildings on other three. Poor neighbourhood. A one story building.

2. Tobin tubes in walls and exhaust in roof, lofty and well-ventilated. Open fireplaces in two small rooms.

3. Natural :—Windows. Artificial :—Ordinary gas, very poor and too high.

4. Two stoves in main room, open fireplaces in two classrooms.

5. There are a few old desks without backs but the majority have them. A gallery at one end is too high, otherwise the equipment is good.

6. Three trough closets flushed three times during school hours. There is a separate one for teachers but is never used as it is not suitable. Urinal without flush, smells very badly in summer.

6a. Two wash basins, in a dirty condition, in a sort of scullery containing cloak pegs.

7. Company's water, good and ample supply. Two taps for drinking purposes over washbasins.

8. Swept down every night and scrubbed out three times a year.

9. None at all.

10. Well arranged for light, etc., but classrooms too small for present purpose ; are being re-arranged.

10a. There is no playground, only a small yard of about 32 sq. yards, paved all over.

Number of children inspected, 94.

Absent on day of inspection, *nil*.

Height and weight of children at various ages :—

	Males.				Females.				
	3-4	4-5	5-6	6-7	3-4	4-5	5-6	6-7	7-8
Age	3-4	4-5	5-6	6-7	3-4	4-5	5-6	6-7	7-8
Number inspected	10	14	14	3	17	23	8	4	1
Average height in inches ..	36 $\frac{3}{4}$	38 $\frac{1}{2}$	41 $\frac{1}{2}$	43 $\frac{1}{2}$	36 $\frac{1}{2}$	38	41 $\frac{3}{4}$	41 $\frac{3}{4}$	45 $\frac{1}{2}$
Average height in centimeters	93.3	97.8	105.4	110.5	92.7	96.6	106.0	106.0	115.5
Standard height in inches ..	..	..	41.0	44.0	..	..	40.5	42.8	44.4
Standard height in centimeters	..	..	104.1	111.7	..	..	102.8	108.7	112.7
Average weight in pounds ..	33 $\frac{3}{4}$	35	39	44 $\frac{1}{2}$	31 $\frac{1}{2}$	34 $\frac{1}{4}$	43 $\frac{1}{4}$	40 $\frac{1}{2}$	44
Average weight in kilogrammes	15.3	15.9	17.7	20.2	14.3	15.5	19.6	18.3	20.0
Standard weight in pounds ..	..	..	39.9	44.4	..	..	39.2	41.7	47.5
Standard weight in kilogrammes	..	..	18.1	20.2	..	..	17.8	18.9	21.5

NUMBER AND PERCENTAGE OF DEFECTS FOUND.

Schedule No.				Males.		Females.	
				No.	Per cent.	No.	Per cent.
4.	Fair	..	..	8	8.5	13	13.8
	Poor	..	..	4	4.2	3	3.1
7.	Fair	..	..	6	6.3	1	1.0
8.	Fair	..	..	5	5.3	6	6.3
	Dirty	..	..	..	..	1	1.0
8a.	Nits	..	..	..	..	8	8.5
	Scurf	..	..	1	1.0		
	Dirty	..	..	..	..		1.0
8b.	Petechia	..	..	1	1.0	..	
9.	Fair	..	..	6	6.3	4	4.2
	Poor	..	..	..	..	4	4.2
	Bad	..	..	4	4.2	3	3.1
10.	Rhinorrhea	..	..	..	..	4	4.2
	Ulcerated Tongue	..	..	..	..	1	1.0
	Bifid Uvula	..	..	..	..	1	1.0
10a.	Enlarged	..	..	2	2.1	8	8.5
10b.	Adenoids	..	..	1	1.0	4	4.2
10c.	Enlarged	..	..	11	11.7	8	8.5
11.	Congenital Ptosis of left eye			1	1.0		
	Blepharitis	..	..	1	1.0	1	1.0
	Old injury to left eye			..	..	1	1.0

Schedule No.	Males.			Females.		
	No.	Per cent.		No.	Per cent.	
12.	Strabismus	1	1.0 ..	1	1.0	
	Internal Strabismus ..	..	.. ..	1	1.0	
13.	Otorrhea .. ..	..	.. ..	1	1.0	
	Intermittent Otorrhea ..	..	.. ..	2	2.1	
15.	Impediment .. ..	..	.. ..	1	1.0	
16.	Dull	1	1.0 ..	1	1.0	
	Bad Temper .. ..	..	.. ..	1	1.0	
18.	Bronchitis	2	2.1 ..	7	7.4	
	Catarrh .. ..	..	.. ..	1	1.0	
19.	Obstinate .. ..	..	.. ..	1	1.0	
21.	Pigeon Breast	2	2.1 ..	1	1.0	
	Chest	1	1.0 ..	1	1.0	
	General	1	1.0 ..			
23.	Impetigo	2	2.1 ..	2	2.1	
	Ringworm	1	1.0 ..			
24.	Incontinence of Urine	1	1.0 ..			
	Facial Eczema	1	1.0 ..	1	1.0	
	Dental Abscess	1	1.0			
	Chronic Dermatitis ..	..	.. ..	1	1.0	
	Weak Ankle .. ..	..	.. ..	1	1.0	
	Nevus under chin ..	..	.. ..	1	1.0	

PERSONAL HISTORY, PREVIOUS INFECTIOUS ILLNESSES.

Measles .. ..	..	..	60	95
Whooping Cough ..	..	..	38	40
Chicken Pox .. ..	..	..	18	19
Scarlet Fever .. ..	..	..	1	1.0
Not Vaccinated ..	..	..	6	6.3

BRITISH BOYS.

1. About 30 yards from main road, surrounded by offices, etc. A one-story building.
2. By Tobin tubes and exhaust in roof. There are no means of warming the air as it enters.
3. Natural :—Windows and skylights. Artificial :—Incandescent gas.
4. Two closed iron stoves in each room, with iron flue through roof.

5. Good.

6. Four long hopper water closets with fixed wood seats, washed weekly. Were in a clean condition. Four urinals. All are flushed at teachers' discretion.

6a. One old sink with portable hand basin.

7. Company's water, good and ample supply.

8. Swept down nightly. The front half scrubbed weekly. All cleaned and scrubbed out four times yearly.

9. None except the stoves in classrooms.

10. As well arranged as is possible. Clerk of works says the school is kept in an excellent condition.

10a. A small paved square in front of school is used as playground. This has now become a Council School.

Number of children inspected, 74.

Absent on day of inspection, *nil*.

Height and weight of children at various ages :—

Age	6-7	7-8	9-10	10-11	11-12	12-13	13-14	14-15
Number inspected	1	1	2	2	4	40	18	6
Average height in inches ..	42½	50½	53	52¾	54¼	55	57½	62¾
Average height in centimeters	107.9	128.2	134.6	134.0	137.8	139.7	146.0	159.3
Standard height in inches ..	44.0	45.9	49.7	51.8	53.5	54.9	56.9	59.3
Standard height in centimeters	111.7	116.5	126.2	131.5	135.9	139.4	144.5	150.6
Average weight in pounds ..	42	57	68	67½	76¾	73¼	82½	103¼
Average weight in kilogrammes	19.1	25.9	30.8	30.6	34.8	33.2	37.4	46.8
Standard weight in pounds ..	44.4	49.7	60.4	67.5	72.0	76.7	82.6	92.0
Standard weight in kilogrammes	20.2	22.5	27.4	30.6	32.7	34.8	37.5	41.7

NUMBER AND PERCENTAGE OF DEFECTS FOUND.

Schedule No.	No.	No.	Per cent.
4 Fair	1	.. ..	1.3
7 Fair	7	.. ..	9.3
Thin	1	.. ..	1.3
8 Dirty	1	.. ..	1.3
8a Scurf	1	.. ..	1.3
Nits	1	.. ..	1.3

Schedule No.					No.			Per cent.
9	Fair	..	..	..	17	..	..	22.9
	Poor	..	..	..	5	..	..	6.7
	Bad	..	..	..	3	..	..	4.0
10a	Enlarged	..	..	..	12	..	..	16.2
10b	Adenoids	..	..	..	9	..	..	11.2
10c	Enlarged	..	..	..	16	..	..	21.6
11	Blepharitis	..	..	..	1	..	..	1.3
	Prominent eyeball	..	..	..	1	..	..	1.3
12	Internal Strabismus	..	..	..	1	..	..	1.3
	Visual Acuity	R.	6/9	..	4	..	..	5.4
			6/12	..	2	..	..	2.7
			6/18	..	3	..	..	4.0
			6/24	..	2	..	..	2.7
			6/36	..	1	..	..	1.3
			6/60	..	1	..	..	1.3
		L.	6/9	..	2	..	..	2.7
			6/12	..	2	..	..	2.7
			6/18	..	5	..	..	6.7
			6/24	..	3	..	..	4.0
13	Otorrhea	..	..	..	1	..	..	1.3
	Intermittent Otorrhea	..	..	..	1	..	..	1.3
14	Impaired one side	..	..	..	2	..	..	2.7
15	Lisp	..	..	..	3	..	..	4.0
	Stammer	..	..	..	1	..	..	1.3
	Stutter	..	..	..	1	..	..	1.3
16	Dull	..	..	..	1	..	..	1.3
17	Mitral Bruit	..	..	..	1	..	..	1.3
	Sounds not clear, apex beat displaced	..	..	..	1	..	..	1.3
18	Harsh breathing left apex	..	..	..	1	..	..	1.3
	Harsh breathing both apices	..	..	..	2	..	..	2.7
19	Excitable	..	..	..	1	..	..	1.3
	Emotional	..	..	..	1	..	..	1.3

Schedule. No.		No.	Per cent.
20	Doubtful	3	4.0
22	Left arm wasted	1	1.3
	Slight Curvature of Spine ..	1	1.3
	Ankylosed knee	1	1.3

PERSONAL HISTORY, PREVIOUS INFECTIOUS ILLNESSES.

	No.	Per cent.
Measles	53	71
Whooping Cough	39	52
Chicken Pox	19	25
Scarlet Fever	16	21
Diphtheria	6	8.1
Not Vaccinated.. .. .	18	24

ARNOLD STREET GIRLS AND INFANTS.

1. In Arnold Street, just off main road. A one-story building surrounded by good class of cottage property. There are two departments under one Head Mistress. Building divided into five classrooms : three being for girls, and two for infants.

2. By Tobin tubes, and exhausts in roof, no cross ventilation, and no means of warming incoming air.

3. Natural :—Windows. Artificial :—Incandescent gas. The natural light is not sufficient in the corners of rooms.

4. Closed iron stoves standing well out into room with flues through roof.

5. Good.

6. Seven trough closets for girls, and two for boys, with automatic flush. Separate accommodation for teachers. Closets scrubbed out weekly. All clean and in good order.

6a. Four zinc washbasins, clean but old fashioned.

7. Company's water, good and ample supply.
8. Swept down nightly, cleaned weekly. Scrubbed and cleaned throughout four times yearly.
9. None ; but stoves in classrooms.
10. Arranged in best manner possible under the circumstances.
- 10a. There is no playground, but the Territorial Drill Hall adjoining is sometimes used for drilling and playing in. There is no land available in the near neighbourhood.

This has now become a Council School.

Number of children inspected, 103.

Absent on day of inspection, *nil*.

Height and weight of children at various ages :

BOYS.

Age	3-4	4-5	5-6	6-7
Number inspected	11	13	2	1
Average height in inches ..	37 $\frac{1}{4}$	39	41 $\frac{1}{2}$	41 $\frac{1}{4}$
Average height in centimeters	94.6	99.0	105.4	104.7
Standard height in inches ..	..	..	41.0	44.0
Standard height in centimeters	..	..	104.1	111.7
Average weight in pounds ..	33 $\frac{1}{2}$	37	38 $\frac{1}{2}$	38
Average weight in kilogrammes	15.2	16.8	17.4	17.2
Standard weight in pounds ..	..	..	39.9	44.4
Standard weight in kilogrammes	..	..	18.1	20.2

GIRLS.

Age	3-4	4-5	5-6	6-7	11-12	12-13	13-14	14-15
Number inspected	6	9	8	1	3	33	15	1
Average height in inches ..	37	37 $\frac{1}{2}$	40 $\frac{1}{2}$	42	56 $\frac{3}{4}$	56	58	65
Average height in centimeters	53.9	55.2	102.8	106.6	144.1	142.2	147.3	165.1
Standard height in inches ..	..	..	40.5	42.8	53.1	55.6	57.7	59.8
Standard height in centimeters	..	..	102.8	108.7	134.8	141.2	146.5	151.9
Average weight in pounds ..	33	34	38 $\frac{1}{4}$	38	81	75 $\frac{3}{4}$	84 $\frac{3}{4}$	112
Average weight in kilogrammes	15.0	15.4	17.3	17.2	37.2	34.3	38.4	50.8
Standard weight in pounds ..	..	..	39.2	41.7	68.1	76.4	87.2	96.7
Standard weight in kilogrammes	..	..	17.8	18.9	30.8	34.7	39.6	43.8

NUMBER AND PERCENTAGE OF DEFECTS FOUND.

Schedule No.				Males.					Females.	
				No.	Per cent.				No.	Per cent.
4.	Fair	..	..	3	2.9	..			6	5.8
7.	Fair	..	..	1	0.9	..			3	2.9
8.	Fair	..	..	2	1.9					
8a.	Nits	..	..	..	..	..			12	11.6
9.	Fair	..	..	..	..	..			12	11.6
	Poor	..	..	1	0.9	..			6	5.8
	Bad	..	..	2	1.9	..			5	4.7
10.	Rhinitis	..	..	2	1.9	..			2	1.9
	Intermittent Rhinorrhea	..		..	..	..			1	0.9
	Large Uvula	..	..	..	..	..			1	0.9
10a.	Enlarged	..	..	4	3.8	..			11	10.6
10b.	Adenoids	..	..	..	..	..			2	1.9
10c.	Enlarged	..	..	6	5.8	..			11	10.6
11.	Blepharitis	..	..	2	1.9					
	Cornea Dull	..	..	..	..	..			1	0.9
12.	Strabismus	..	..	1	0.9					
	Convergent Strabismus			1	0.9					
12a.	Visual Acuity	R.	6/9	..	..	..			3	2.9
			6/12	..	..	..			4	3.8
			6/18	..	..	..			1	0.9
			6/24	..	..	..			3	2.9
		L.	6/9	..	..	..			3	2.9
			6/12	..	..	..			4	3.8
			6/18	..	..	..			1	0.9
			6/24	..	..	..			3	2.9

Schedule No.	Males.			Females.		
	No.	Per Cent.		No.	Per Cent.	
13.	Otorrhea	1	0·9	1	0·9	
	Intermittent Otorrhea	2	1·9	2	1·9	
14.	Impaired	1	0·9	1	0·9	
15.	Thick.. ..	1	0·9			
	Nasal .. ..	..	..	1	0·9	
	Lisp .. ..	..	..	1	0·9	
16.	Defective .. ..	..	..	1	0·9	
17.	Mitral Regurgitation	..	..	1	0·9	
	Heart sounds not pure	..	..	1	0·9	
	Systolic Bruit .. ..	..	..	1	0·9	
	Heart rapid and irregular	..	..	1	0·9	
18.	Harsh breathing ..	1	0·9	1	0·9	
20.	Throat .. ..	..	..	1	0·9	
	Left Hip (wears high boot)	..	..	1	0·9	
21.	Pigeon breast ..	1	0·9			
22.	Spinal Curvature ..	..	..	1	0·9	
	Flat chest .. ..	..	..	1	0·9	
	Lump in each calf	1	0·9			
23.	Scabies .. ..	..	..	1	0·9	
	Impetigo .. ..	..	..	1	0·9	
24.	Chronic Dermatitis..	..	..	1	0·9	
	Catarrh .. ..	..	..	1	0·9	
	Cleft Palate .. ..	..	..	1	0·9	
	Subject to vomiting	..	..	1	0·9	

PERSONAL HISTORY, PREVIOUS INFECTIOUS ILLNESSES.

Measles	86	83
Whooping Cough	43	41
Chicken Pox	36	34
Scarlet Fever	10	9·7
Diphtheria	5	4·7
Not Vaccinated	8	7·7

Height and Weight of all children at various ages:—

MALES.

Age	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15
Number inspected	38	129	98	34	19	19	8	8	23	242	184	22
Average height in inches	37 $\frac{1}{4}$	39 $\frac{3}{4}$	41 $\frac{1}{2}$	43 $\frac{1}{4}$	47 $\frac{1}{2}$	48 $\frac{1}{2}$	50 $\frac{3}{4}$	52 $\frac{3}{4}$	55 $\frac{1}{4}$	55 $\frac{3}{4}$	56 $\frac{1}{2}$	59 $\frac{1}{4}$
Average height in centimeters	94.6	100.9	104.7	109.8	120.6	123.1	128.9	133.9	140.3	141.6	142.2	150.5
Standard height in inches	..	..	41.0	44.0	45.9	47.0	49.7	51.8	53.5	54.9	56.9	59.3
Standard height in centimeters	..	..	104.1	111.7	116.5	119.3	126.2	131.5	135.9	139.4	144.5	150.6
Average weight in pounds	33 $\frac{1}{2}$	36 $\frac{3}{4}$	39 $\frac{1}{2}$	42 $\frac{1}{4}$	50 $\frac{1}{2}$	55	60	65 $\frac{3}{4}$	71 $\frac{1}{2}$	75	77 $\frac{1}{2}$	86 $\frac{3}{4}$
Average weight in kilogrammes	15.2	16.6	17.9	19.2	22.9	24.9	27.2	29.7	32.4	34.0	35.1	39.3
Standard weight in pounds	..	..	39.9	44.4	49.7	54.9	60.4	67.5	72.0	76.7	82.6	92.0
Standard weight in kilogrammes	..	..	18.1	20.2	22.5	24.9	27.4	30.6	32.7	34.8	37.5	41.7

FEMALES.

Age	..	..	..	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15
Number inspected	..	..	..	32	112	93	37	17	17	11	12	28	226	208	15
Average height in inches	..	..	..	36 $\frac{3}{4}$	38 $\frac{3}{4}$	41 $\frac{1}{4}$	43 $\frac{1}{4}$	46 $\frac{1}{2}$	47	50 $\frac{1}{2}$	53 $\frac{1}{2}$	53 $\frac{1}{2}$	56 $\frac{1}{4}$	58 $\frac{1}{4}$	60 $\frac{3}{4}$
Average height in centimeters	..	..	..	93.3	98.4	104.7	109.8	118.1	119.3	128.2	135.9	135.9	142.8	147.9	154.3
Standard height in inches	..	..	..	..	..	40.5	42.8	44.4	46.6	48.7	51.0	53.1	55.6	57.7	59.8
Standard height in centimeters	..	..	..	..	..	102.8	108.7	112.7	118.3	123.7	129.5	134.8	141.2	146.5	151.9
Average weight in pounds	..	..	..	31 $\frac{3}{4}$	35	38 $\frac{1}{2}$	41	46 $\frac{1}{4}$	52	57	68	67 $\frac{1}{4}$	74 $\frac{1}{2}$	82 $\frac{1}{4}$	98 $\frac{1}{4}$
Average weight in kilogrammes	..	..	..	14.4	15.9	17.4	18.6	20.5	23.6	25.9	30.8	30.5	33.8	37.3	44.6
Standard weight in pounds	..	..	..	..	..	39.2	41.7	47.5	52.1	55.5	62.0	68.1	76.4	87.2	96.7
Standard weight in kilogrammes	..	..	..	..	..	17.8	18.9	21.5	23.6	25.1	28.1	30.8	34.7	39.6	43.8

SCHEDULE OF MEDICAL INSPECTION.

I.--Name
Surname First.
Date of Birth.....
Address.....
School.....

II.—Personal History:

(a) Previous Illnesses of Child (before admission).

Measles..... Scarlet Fever.....
Whooping Cough..... Diphtheria.....
Chickenpox..... Other Illnesses.....

(b) Family Medical History (if exceptional).

III.—If Vaccinated.....

General Observations:

Directions to Parent or Teacher:

- 1. Date of Inspection
- 2. Standard and Regularity of Attendance
- 3. Age of Child
- 4. Clothing & Footgear
- 5. Height
- 6. Weight
- 7. Nutrition
- 8. Cleanliness and condition of skin
 - Head
 - Body
- 9. Teeth
- 10. Nose and Throat
 - Tonsils
 - Adenoids
 - Submax. & cervical glands
- 11. External eye disease
- 12. Vision
 - R.
 - L.
- 13. Ear disease
- 14. Hearing
- 15. Speech
- 16. Mental Condition
- 17. Heart and circulation
- 18. Lungs
- 19. Nervous system
- 20. Tuberculosis
- 21. Rickets
- 22. Deformities, Spinal Disease, &c.
- 23. Infectious or contagious disease
- 24. Other disease or defect

Medical Officer's initials

MEMORANDUM

ON

CLOSURE OF AND EXCLUSION FROM SCHOOL.



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MEMORANDUM to Medical Officers of Health and School Medical Officers upon Public Health Administration for the Prevention of the Spread of Infectious Diseases occurring among Children attending Public Elementary Schools, with special reference to the circumstances in which the Closure of Schools, or the Exclusion of Individual Scholars, may be necessary.

This Memorandum is a revised and enlarged edition of the "Memorandum on the Circumstances under which the Closing of Public Elementary Schools or the Exclusion therefrom of particular Children may be required in order to prevent the spread of Disease," which was last issued by the Local Government Board in January 1908. The circumstances which have occasioned the revision of the Memorandum and the addition of much new matter are referred to below, and it has been considered desirable that the revised Memorandum, in the preparation of which the Chief Medical Officer of the Board of Education has co-operated, should now be issued.

September, 1909.

PART I.—INTRODUCTORY AND GENERAL.

1. School hygiene has been placed upon an altered footing by Section 13 of the Education (Administrative Provisions) Act, 1907; and the introduction of the School Medical Officer into the local administrative machinery of preventive medicine has been accompanied in the Code of Regulations for Public Elementary Schools (1909) by new or modified provisions as to medical inspection, and as to the closure of schools and the exclusion of individual scholars with a view to the prevention of the spread of disease.

As will be seen from a consideration of this Memorandum, the recent changes have materially increased the possibilities of effective action against disease possessed by local authorities and their medical officers.

CODE REQUIREMENTS FOR SCHOOL CLOSURE AND FOR THE EXCLUSION OF INDIVIDUAL SCHOLARS.

School Closure.

2. The Code for 1909 contemplates that in certain particulars new administrative conditions shall be satisfied before the Board of Education will allow a claim for grant in respect of schools which, owing to closure with a view to preventing the spread of disease, have not been open the requisite number of times.

This closure may be compelled by the Sanitary Authority under Article 57 of the Code, or may be voluntary on the part of the Local Education Authority. Article 57 is as follows :—

Article 57. If the Sanitary Authority of the district in which the school is situated, or any two members thereof, acting on the advice of the Medical Officer of Health, require either the closure of the school or any department thereof, or the exclusion of certain children for a specified time, with a view to preventing the spread of disease or any danger to health likely to arise from the condition of the school, such requirement must at once be complied with.

As regards the Grant, provision is made by Article 45 (b) where a school is compulsorily closed or is closed under the advice or with the approval of the School Medical Officer, or for any other unavoidable cause. It runs as follows :—

Article 45 (b). If the requisite number of meetings has not been held owing to a closure of the school under Article 57, or under the advice or with the approval of the School Medical Officer, or for any other unavoidable cause, the grant will be paid in full, provided that the requirements of this Article are satisfied after an allowance of nine meetings has been made for each week of such closure.

Exclusion of Children.

If the Sanitary Authority or two members thereof, acting on the advice of the Medical Officer of Health, require the exclusion of certain children for a specified time in order to prevent the spread of disease those children must be excluded (Article 57). Thus the Medical Officer of Health can initiate a compulsory process whether for closing the school or for excluding scholars, though he can only do so through the Sanitary Authority or two members thereof.

The exclusion of children is also provided for on the authorisation of the School Medical Officer by Article 53 (b) of the Code, which is as follows :—

Article 53 (b). Where the Board (of Education) are satisfied (i) that proper arrangements have been made by the Local Education Authority for enabling the School Medical Officer to ascertain and certify cases in which the exclusion of children from school is desirable, and (ii) that the School Medical Officer has authorised the exclusion of certain children from the school

(1) on the ground that their exclusion is desirable to prevent the spread of disease, or

- (2) on the ground that their uncleanly or verminous condition is detrimental to the other scholars, or
 - (3) on the ground that, owing to their state of health or their physical or mental defects, they are incapable of receiving proper benefit from the instruction in the school,
- the exclusion of such children shall be deemed for the purposes of this Code to be exclusion on reasonable grounds.

For the purposes of this provision the Local Education Authority may direct that no children who have been excluded under the authority of the School Medical Officer or under Article 57 or who have been absent from School owing to sickness, shall be re-admitted to school if the School Medical Officer is not satisfied that they can attend school without risk to themselves or others.

Every direction or authority given by the School Medical Officer must be embodied in a certificate signed by him. A copy of every certificate must be furnished to the Local Education Authority and must be produced, if required, to any Inspector or Officer of the Board's Medical Department.*

3. The general effect of the changes which these Articles of the Code bring about may be stated as follows :—

- (a) Henceforth there is no appeal against requirements of the Sanitary Authority made in accordance with the terms of Article 57.
- (b) Under previous Codes the requirements of the Article corresponding to Article 45 (b) have been satisfied when a school has been closed voluntarily "under medical authority" including the advice or approval of any medical practitioner. Under the present Code where closure for medical reasons has been effected voluntarily, the requirements of Article 45 (b) will not be satisfied unless the School Medical Officer recognised by the Board of Education has advised or, where he has not advised, approves the closure.
- (c) In practice it is customary for the Medical Officer of Health, without resorting to the formal procedure of Article 57, to arrange, as soon as an infectious case is notified to him, for the temporary exclusion from school of the infected child and of any children who have been in contact with the infectious case, or of any children suspected of being themselves infectious. If such exclusions are to be deemed to be on "reasonable grounds" they must, in accordance with Article 53 (b), be endorsed at the time or subsequently by the School Medical Officer. In previous Codes exclusion on any medical authority has been regarded as "reasonable ground" for exclusion. The new conditions indicate the desirability of a working arrangement between the

* For the purposes of the Code "School Medical Officer" means a medical officer named by the Local Education Authority, and recognised as such by the Board of Education. In exceptional cases the Board of Education will recognise separate School Medical Officers for separate parts of one area.

Medical Officer of Health and the School Medical Officer, when they are not the same officer, in order that the former may not need to adopt the procedure provided in Article 57, for the formal and compulsory exclusion of individual scholars.

CO-ORDINATION OF WORK OF MEDICAL OFFICER OF HEALTH AND OF THE SCHOOL MEDICAL OFFICER AND OTHER SCHOOL OFFICERS.

4. It is the desire alike of the Local Government Board and of the Board of Education that the relations of the local Sanitary Authority and of the Local Education Authority, should in all respects be intimate and cordial, in order that the administrative procedures of both bodies may be reciprocally beneficial. It is only by such mutual co-operation that the best interests of each district can be secured to the fullest extent.

5. It must, however, be borne in mind that the Medical Officer of Health, acting under the Sanitary Authority, is responsible for dealing with outbreaks of infectious disease, including such outbreaks in schools; and the action of the School Medical Officer, where he is not also Medical Officer of Health, must be consistent with this general consideration. The importance of this consideration is indicated by the fact that the statutory powers as to isolation of patients and the cleansing and disinfection of houses are possessed by Sanitary Authorities alone. The new requirements of the Code in no way diminish the responsibility of the Medical Officer of Health for taking all such steps as are demanded in the public interest to prevent the spread of infection. As a matter of administrative educational procedure the certificate of the School Medical Officer is required under Article 53 (b) for cases of exclusion, and for voluntary closure of a school for infectious disease under Article 45 (b); but the Medical Officer of Health must be in a position to act promptly in each instance, more particularly in regard to exclusion. Cases may frequently occur where prompt action is essential, and where valuable time would be lost by reference either to the Sanitary Authority, with a view to the issue of requisitions under Article 57, or to the School Medical Officer; and it is eminently desirable that in these cases, more especially as regards the exclusion of individual scholars, the Medical Officer of Health should be in a position to take immediate action.

6. This end can best be secured, in cases where the Medical Officer of Health is not himself the School Medical Officer, by the establishment of definite working arrangements between these two officers under which, on the one hand, Local Education Authorities will authorise Managers and Teachers to act, as in the past, on the recommendations of the Medical Officer of Health, and, on the other hand, the Sanitary Authorities will arrange that the Medical Officer of Health embodies his recommendations in certificates which are transmitted to the School Medical Officer with a view to the formal authorisation required by Article 53 (b) of the Code

in cases of exclusion, and to the approval required by Article 45 (b) in cases of closure. Where such working arrangements are adopted, it should seldom be necessary under the new conditions for the Medical Officer of Health to advise the Sanitary Authority, or two Members thereof, to put into force the powers conferred upon them by Article 57 of the Code.

7. The conditions under which mutual co-operation between officers of the local Sanitary Authority and of the Local Education Authority can be made most effective will vary according to local organisation. When in autonomous areas the Medical Officer of Health and the School Medical Officer are the same officer, direct unity of action is at once obtained. In all other cases waste of effort and some duplication of work can only be avoided by agreement between the two officers and their authorities on general lines of action, both as to the details of medical administration, and as to the regulations for teachers and other school officers mentioned in paragraph 9.

In county areas, where the County Medical Officer of Health is also the School Medical Officer, he is in a position to organise the needed co-operation. Where, however, these offices are held by different persons, or where there is no County Medical Officer of Health, it is obviously desirable that definite arrangements should be made between the Local Education Authority and the local Sanitary Authorities providing for the harmonious co-operation of their respective officers. When Assistant School Medical Officers are not themselves the District Medical Officers of Health, the need for frequent interchange of information between the officers of the Sanitary and Education Authorities will arise; and lines of action in regard to closure of schools and the exclusion of individual scholars will need to be settled with due reference to the particular circumstances of the area, and to the regulations adopted by the Local Education Authority for the organisation of the School Medical Service.

8. In order that the requirements of Article 53 (b) of the Code may be met, it is necessary that all cases of exclusion from school by the direction of the Medical Officer of Health should be promptly reported by that officer to the School Medical Officer. As a rule closure of the school should only be arranged in consultation with the School Medical Officer. This rule should be followed, save in serious emergency; and when immediate closure is necessary in the interests of public health, the Medical Officer of Health should at once communicate with the School Medical Officer.

9. Efficiency in the prevention of the spread of infection implies active co-operation not only between the Medical Officer of Health and the School Medical Officer, but also between these officers and the school teachers, school nurses, and attendance officers. This general need can be met by each Local Education Authority making regulations as to the duties of each of their officers to send forthwith to the Medical Officer of Health and to the School Medical Officer, information regarding any children suspected to be suffering from infectious illness, and to exclude such children

temporarily. This point is emphasised in the following recommendation quoted from Circular 596 issued by the Board of Education on 19th of August, 1908 :—

He (the School Medical Officer) must so organise his machinery that both he and the Sanitary Authority shall receive immediate information of any such occurrence (of infectious disease) whether the disease is notifiable or not, by duplicate notices or otherwise, so that the matter may be dealt with effectively and without confusion at the earliest possible moment. Definite regulations should be made for this purpose.

It is expected that such regulations defining the circumstances in which teachers and other school officers should notify suspected cases of infectious disease to the Medical Officer of Health and to the School Medical Officer will be made generally by Local Education Authorities.

PART II.—PRINCIPLES OF ACTION.

INFORMATION AS TO NOTIFIABLE DISEASES.

10. Success in the control of infection depends on the completeness and promptitude with which each case of infectious disease is recognised, and the completeness and promptitude of the action taken on this information. In this and the following eight paragraphs the means of obtaining such complete and prompt information are considered. All known cases of the diseases coming within the scope of the Infectious Disease (Notification) Acts or of Section 55 of the Public Health (London) Act are notified to the Medical Officer of Health. Scarlet fever and diphtheria are the most common diseases affecting school children which are thus notifiable. Measles and whooping-cough, which are even more prevalent among school children, do not in the majority of sanitary districts come within the scope of the Notification Acts, though they can be added by resolution of the Sanitary Authority subject to the approval of the Local Government Board.

Investigation of "Missed Cases."

11. In the administrative control of such notifiable diseases, therefore, action must start with the Medical Officer of Health. In a well-organised and efficiently worked sanitary district each notification by a medical practitioner of a case of one of the notifiable diseases should form the starting point for a prompt and full investigation of the possibilities of infection. As stated in Article 18 (2) of the Local Government Board's Regulations as to Medical Officers of Health, it is the duty of the Medical Officer of Health "to enquire into and ascertain by such means as are at his disposal the causes, origin and distribution of diseases within his district"; and with this object in view he will regard each case of notified disease as possibly connected with other cases of the same disease, which owing to their mildness, or the absence of some of the characteristic symptoms, have been overlooked by the parent, or the teacher, or both. The investigation of such missed cases is indispensable to effective administration. A portion of this investigation may need to be undertaken at the patient's home; it is incomplete unless an equally thorough inquiry has been made into the condition of the children who have been in contact at school with the scholar who has fallen ill. This inquiry should be shared by the Medical Officer of Health and the School Medical Officer, if these offices are not held by the same official. It should include the recent history and present condition of children who have recently returned to school after an interval of absence, and be followed by careful watching of the children who have been in contact with the infectious case.

Instructions to Teachers and Parents.

12. It is in connection with these investigations that the co-operation of teachers and parents is needed, as well as of the School Medical Officer whenever the latter can help in this work. Infection is often spread in school by the attendance of children suffering from initial and unrecognised symptoms, or attending school in the convalescent stage, or throughout the course of a mild attack

of an infectious disease. To minimise the danger, the teacher should be instructed in the symptoms of onset of the chief infectious diseases, and the symptoms which may be manifested by children who have recently passed through the acute stages of these diseases. Clear directions should be given by Local Education Authorities instructing teachers temporarily to exclude children showing any symptom suggestive of any of these diseases, until medical assurance can be had that they may attend school without harm to themselves or danger to other scholars. Instructions of this kind will naturally find a place in the arrangements required by Article 53 (b) of the Code for enabling the School Medical Officer to ascertain and certify cases in which exclusion is desirable. During the prevalence of any particular infectious disease the attention of the teacher may be drawn, by circular letter or otherwise, to the most obvious symptoms indicating the possibility that a scholar is sickening for, or is suffering or recovering from, this disease.

Intimations by School Officers to Medical Officer of Health and School Medical Officer.

13. Under regulations framed as suggested in paragraph 9, or apart from such regulations, the school teacher and school attendance officer should inform both the Medical Officer of Health and the School Medical Officer of any children who have recently been kept at home with illness of a suspicious character, or concerning whom circumstances suggest the possibility of infection. This information probably will have come to the teacher and to the attendance officers from direct communication with parents. In some instances the attendance officers and in others the teachers may obtain the earliest information; and the system of intimations to the medical officers should be so arranged as to secure the simultaneous conveyance to the Medical Officer of Health and to the School Medical Officer of such information. No harm can come from duplication of such notifications, and the Local Education Authority can by careful organisation devise arrangements which shall be prompt and effective and at the same time easy in application.

14. Opportunity should be taken by circular letters or otherwise to impress upon parents their responsibility in preventing the spread of infection in schools, especially when any special disease threatens to become prevalent. The particular attention of parents should be drawn to the fact that a "bad cold" or an "ulcerated throat" or a "spring rash" may, in fact, indicate a mild attack of diphtheria or scarlet fever, and that to send children to school either so suffering or when convalescing from such conditions, without having first obtained a medical opinion, may involve serious consequences to other children.

Occasional Diagnosis by Medical Officer of Health.

15. The difficulty occasionally arises that the parents of a child who is suspected to be suffering from a mild attack of an infectious disease cannot afford to send, or will not send, for a doctor, although they have kept the child away from school for a few days. Exclusion from school must be continued in these, as in all cases of

suspicion, until doubt as to the nature of the case has been removed; and meanwhile the parent must be pressed to utilise the private or public agencies available for medical diagnosis according to circumstances. In such cases if delay and consequent danger of spread of infection are to be avoided, the Medical Officer of Health or the School Medical Officer or some other medical man temporarily or permanently acting for the Sanitary Authority, should make or aid in making a diagnosis. This corresponds to the general practice in investigating outbreaks of small-pox; and its more frequent adoption for other infectious diseases would enable local authorities to make better use of their isolation hospitals and other official machinery for preventing the spread of disease.

Intimations by Medical Officer of Health to School Medical Officer and Head Teacher.

16. The information as to notifiable infectious cases among school children obtained by the Medical Officer of Health should be promptly transmitted to the School Medical Officer and to the Head Teacher of the school concerned, in order that the necessary instructions as to exclusion from school, &c. may be given. In the Metropolis, under Section 55 (4) of the Public Health (London) Act, 1891, it is compulsory on the Medical Officer of Health to send a copy of each notification certificate within twelve hours after its receipt to the Head Teacher of the school attended by the patient (if a child), or by any child who is an inmate of the same house as the patient. In sanitary districts outside the Metropolis similar intimations should be sent promptly both to the School Medical Officer and to the Head Teacher. The notice thus sent to the teacher may also usefully comprise general information on the symptoms of infectious diseases.

INFORMATION AS TO THE NON-NOTIFIABLE DISEASES.

17. Measles, whooping-cough, mumps, chicken-pox and infectious diseases other than scarlet fever and diphtheria, which prevail among school children are seldom added by Sanitary Authorities to the schedule of compulsorily notifiable diseases. Even in districts in which any of these diseases are notifiable, the parents commonly either do not consult a doctor, or they call him in after secondary infection of other children has already occurred. Hence the Medical Officer of Health is dependent for information on the School Medical Officer and on parents, teachers, and attendance officers; and if the rapid spread of these diseases in school and the need for exclusion from school on a large scale or for school closure are to be avoided, school officers and parents should furnish this information to the Medical Officer of Health. Prompt and complete notification to the Medical Officer of Health and to the School Medical Officer of such "minor" cases of infectious disease is difficult to ensure; but the appropriate action of Local Education Authorities on the recommendation contained in paragraph 7 (c) of the Board of Education Circular 596, dated 17th August, 1908, will, it is hoped, go far towards securing this end. (*See paragraph 9 ante.*)

Intimations as to Cases of Doubtful Nature.

18. Apart from systematic and prompt intimation to the medical officers by teachers and attendance officers of all cases of the non-notifiable infectious diseases ascertained by them, further intimations should be sent by them of the absence from school of any child on the suspicion that it is suffering from an infectious disease; and absence of several children of one family from school at the same time, no matter what name be given to the complaint that keeps them at home, should also be reported. In practice it has been found that such intimation of absentees has materially aided the Medical Officer of Health in taking measures for the suppression of infectious disease.

19. The medical inspections carried out under the Education (Administrative Provisions) Act of 1907 will in due course enable the medical history of each scholar in respect of infectious diseases to be recorded; and the knowledge thus secured will in the future be valuable in determining whether in particular cases children need to be excluded from school or classes need to be closed when an outbreak of infectious disease occurs. It is anticipated that this information will be valuable especially in dealing with outbreaks of measles.

It is possible that in the light of these records and of further work under the new statutory and administrative conditions, some modification of the rules for exclusion and closure given in paragraphs 37 to 54 may be indicated.

GENERAL CONSIDERATIONS AS TO THE ACTION TO BE TAKEN
IN RESPECT OF INFECTIOUS DISEASES OCCURRING AMONG
SCHOOL CHILDREN.

20. There is little doubt that infection in schools is spread to a much greater extent by infectious persons than by infected things; and that by systematically obtaining the information as to the infectious cases indicated in paragraphs 10 to 19, and by adopting the measures of exclusion of patients and of recent "contacts" with them which are described in paragraphs 37 to 55 the common sources of infection can be controlled.

21. Subject to this chief consideration, certain other administrative lines of action may be here indicated. Disinfection of special class rooms or of particular articles should be undertaken when there is reason to believe that these have been infected. A special caution may be given as to the risk arising from moistening slates with saliva, or from the use in common of penholders and pencils which are apt to be put in the mouth; and steps should be taken to avoid this.

22. The frequent and thorough washing of class-rooms and cloak-rooms is an efficient means of removing both dust and infection. Dry sweeping on the other hand tends to scatter dust.

23. Much can be done to prevent the spread of infection by due attention to the sanitation and ventilation of school-rooms and

cloak-rooms; and, so far as practicable, by preventing children having to sit in school in wet clothes or with wet feet. Overcrowding greatly favours the spread of infection, while adequate means of ventilation kept in constant effective use diminish it. The water supply of the school should be pure; and lavatories and closets should be kept in a satisfactory state.

(i.) *Exclusion of Individual Children.*

24. It may be laid down as a general principle that all children suffering from any dangerous infectious disease (*i.e.*, of a nature dangerous to some of the persons attacked by it, however mild in other cases) should be excluded from school until there is reason to believe that they have ceased to be in an infectious condition (see section 126 of the Public Health Act, 1875, also section 57 of the Public Health Acts Amendment Act, 1907; the latter section may be put in force in any district by Order of the Local Government Board).

Furthermore, as it is seldom possible to provide effectual separation of the sick from the healthy within the homes of children attending public elementary schools it is often necessary that all children of an infected household should be excluded from school; first, because otherwise such children, if unprotected by a previous attack, might attend school while suffering from the disease in a latent form, or at an unrecognised stage; and secondly, because it is known that infection of certain diseases may attach itself to, and be conveyed by, the throat secretions or the clothes of a person living in an infected dwelling, even though the person himself remain unaffected. The same considerations will sometimes make it desirable to prohibit the attendance at school of children who are known to have been in contact with a source of infection; of children of certain ages or classes; or of children from a particular street or hamlet.

25. The mode of procedure as regards recognised disease will depend on the natural history of the disease concerned. Patients themselves must not be allowed to attend school (a) until free from infection, and (b) until such disinfection of the house and of the patient's apparel as may be necessary has been secured. It is impossible to state exactly when personal infection ceases, and the Medical Officer of Health must not assume that at the end of the ordinary period of isolation danger to others has, without doubt, entirely ceased. It has ceased in the majority of instances; but in a minority of cases—for instance of scarlet fever and of diphtheria, whether treated at home or in an isolation hospital—the child remains infectious for a much more protracted period; and in practical administration this possibility must be borne in mind and allowed for.

26. The action with regard to healthy children in the same household as the patient will vary in different instances. The usual procedure is to allow their return to school at an interval after the removal or complete recovery of the patient and disinfection of the house a little longer than the maximum known period of incubation

of the disease in question. In view of the occurrence of slight overlooked cases and of "carrier" cases of infection, it is often advisable to prolong to a certain extent, as indicated hereafter, this period of exclusion from school.

27. Exclusion from school of the children of infected households most often fails as a means of preventing spread of infection because there are undiscovered or unrecognised cases or carriers of infection; and its failure points to the continued attendance at school of children having recently had attacks of the prevalent disease in a mild or unrecognised form or who without themselves being ill are carriers of infection. Such unrecognised cases are to be sought especially among (a) children attending school from the same street or vicinity as the recognised patients; (b) children in the same class; and especially (c) children who on reference to the school register are found to have returned to school after a short absence.

Although the provision will probably be more useful in private schools, attention may be drawn to section 58 of the Public Health Acts Amendment Act, 1907, which, in districts in which it has been put in force, enables lists of scholars in a school in which any scholar is suffering from an infectious disease to be obtained.

(ii.) *School Closure.*

28. School closure is occasionally necessary on account of infectious sickness in the teacher's family involving risk to the scholars. It is also occasionally necessary to close a school or division for one or two days in order that it may be disinfected and cleansed after children suffering from infectious disease have been in attendance, or to allow of the rectification of sanitary defects of a nature likely to contribute to outbreaks of disease.

29. But in the absence of such special and exceptional reasons for closure, it should not often be necessary to close the school in the interests of public health, if the power to exclude individual children be used to the best advantage. It is only when this less comprehensive but more discriminating and often sufficient action has failed, or owing to imperfect co-operation between the public health and the school authorities cannot be applied to the necessary extent, that the question of advising the Sanitary Authority to require the closure of the school in the interests of public health can arise.

30. It must be remembered that the closure of the school will deprive the Medical Officer of Health and the School Medical Officer of information respecting attacks in their early stage or illness of doubtful nature which would otherwise be obtainable and in any circumstance will interfere seriously with the education of the scholars. Closure, therefore, should be advised by the Medical Officer of Health only in circumstances involving imminent risk of an epidemic, and not then as a matter of routine nor unless there be a clear prospect of preventing the spread of infection such as cannot be expected from less comprehensive action.

31. School closure is more likely to aid in preventing the spread of disease in scattered rural districts than in towns, owing to the

fewer opportunities which exist in the former for intercourse between the children of different households elsewhere than at school.

It has also to be borne in mind that in such scattered rural districts means of isolation and of tracing doubtful cases are less effective. Hence school closure is likely to continue to be needed somewhat more frequently in such districts than in towns.

32. In places where there are several public elementary schools, if an outbreak of infectious disease be confined to the scholars of one particular school, it may be sufficient to close that school only, and even where school closure is deemed necessary in the case of a particular school it need not always extend to the whole school or department, but may on suitable occasions be limited to particular classes or departments.*

33. On the other hand where different schools have all appeared to aid in the spread of disease, though perhaps to an unequal extent, it may be considered advisable that all should be closed lest children in an infectious state who previously attended the schools that are closed, should be sent to others that might remain open. There is, however, less likelihood than heretofore that such attendance will be permitted, and a general closure on this ground will seldom be needed.

34. Playgrounds should not remain open when schools are closed, as they provide a meeting-place for the children whom it is the object of the closure to keep apart.

35. It may be laid down as a general principle that closure of a school or of a particular class is justified when the general evidence points to this school or class as the source of infection, and when cases of an infectious disease continue to occur in this class or school after every effort to discover the infecting cases has been made. The degree of application of this principle to special cases is discussed later.

36. But while the Medical Officer of Health in deciding whether to advise the Sanitary Authority to require the closure of a public elementary school† will be guided mainly by the consideration how

* It is to be understood that the exclusion of all the children in a particular class in a department or school leaving the other children in the department or school free to attend school is not for the purposes of Article 45 (b) of the Code "closure" of the department or school, and that the provisions of that article do not apply in such cases.

† Sanitary Authorities have no general power in respect of Sunday schools, or other private schools, except in so far as these may contravene Section 91 (5), Section 126, or other provision of the Public Health Act, 1875, but it will often be expedient to invite the co-operation of managers of such schools in efforts for securing the public health. Experience shows that they are usually ready to defer to the representations of the authority responsible for the public health of the district.

If, however, the Local Government Board, on the application of the local authority, have declared Sections 57 and 58 of the Public Health Acts Amendment Act, 1907, to be in force in the district, the Medical Officer of Health will have power to require a child who is or has been suffering from infectious disease or has been exposed to infection to be excluded from school until the Medical Officer has certified that the child may attend school without undue risk of communicating such disease to others (Section 57). The power given to the Sanitary Authority by Section 58 to obtain a complete list of the names and addresses of day scholars in schools in which any scholar is suffering from infectious disease may be useful to the Medical Officer of Health in his investigation of the causes of outbreaks if he finds it necessary to extend his enquiry to private schools.

best to check the spread of disease, other considerations may require also to be taken into account by the School Medical Officer in deciding whether to advise or to approve action taken voluntarily under Article 45 (b) of the Code.

School attendance may be greatly lowered during the prevalence of an infectious disease, especially of measles and whooping-cough, and school closure may then be desired to avoid a considerable reduction in the average attendance. In such circumstances a large proportion of susceptible children have generally already contracted the disease or been exposed to infection, and the closure of the school commonly does little to prevent further spread of the disease. Closure by the Sanitary Authority under Article 57 of the Code is contemplated solely in the interests of public health, and apart from this consideration the Medical Officer of Health is not justified in advising closure to prevent financial loss to the Local Education Authority.

The question of closure, when that step is not clearly necessary to prevent the spread of disease, should therefore be left to the voluntary action of the Local Education Authority advised by the School Medical Officer, if he is not himself Medical Officer of Health. That officer, however, before advising or approving closure, should confer with the Medical Officer of Health on the public health aspects of the proposed closure.

PART III. RULES FOR ACTION IN RESPECT OF PARTICULAR DISEASES AND RULES OF OFFICIAL PROCEDURE.

37. The diseases for the prevention of which the exclusion of particular children from school or school closure may be required are principally those which spread by infection directly from person to person, such as measles, whooping-cough, scarlet fever, diphtheria, epidemic influenza, small-pox and r6theln (German measles). In rare cases the same measures may be necessary for enteric fever and diarrhoeal diseases, when these spread through the agency of local conditions, such as infected school privies.

38. In the light of the general principles already set out the following procedure appears to be indicated in order to enable the Medical Officer of Health or the School Medical Officer to advise as to the minimum duration of exclusion of school children which can with reasonable safety be adopted in the several more common infectious diseases.* It should be noted that although certain recommendations are made as to duration of exclusion of patients and of "contacts" with them, these recommendations are subject to the proviso that *each case as it occurs requires and should receive individual consideration.*

Scarlet Fever.

A. RULES FOR EXCLUSION OF INDIVIDUALS.

(1.) *As regards each child attacked by the disease.*

39. (a.) *When treated in the Isolation Hospital* he is usually detained for about six weeks, and longer if any mucous discharges continue. After return home, in view of the occasional protracted infectiousness of patients with such discharges, and sometimes even of those without them, a notice should be sent to the teacher, and a notice should also be given to the parent to the effect that the patient should not attend school for two weeks.†

(b.) *When the patient has been treated at home* the same rules apply exactly, assuming that the patient and his rooms have been effectively disinfected after the illness has ended.

(2.) *As regards children living in infected houses.*

40. (a.) *When the patient has been removed to the Isolation Hospital* the teacher and the parents should be instructed to keep all children living in the same house away from school for two complete weeks from the day on which disinfection, subsequent to the removal of the patient, has taken place; and the parents of all children in the house, especially the

* In this connection the provisions of Article 53 (b), small print, of the Code for 1909 (quoted on page 5 of this Memorandum) must not be overlooked, and it must be remembered that, if the Local Education Authority so direct, the School Medical Officer will have full power to prolong the period for which any children have been excluded from school owing to sickness.

† A longer period, e.g., of four weeks may not infrequently be necessary, not only in view of the health of the patient, but also if the occurrence of mucous discharges or other circumstances indicate that some measure of infectiousness may persist after cessation of home or hospital isolation.

parents of the patient, should be instructed to keep these children out of contact with other children for the same period.

This interval, although longer than the longest recognised incubation period for scarlet fever, is desirable in the case of children because of the occasional occurrence of anomalous or slight unrecognised attacks.

(b.) *When the patient is treated at home* no other children from the same house should attend school while the patient is infectious, nor for two weeks after the end of his period of isolation.

B. RULES FOR CLOSURE OF SCHOOL.

41. If there is active co-operation between the school attendance officers and teachers and the Medical Officer of Health, school closure should only exceptionally be needed for scarlet fever. In school this disease usually spreads slowly from child to child, and not in the explosive manner characteristic of measles. Hence diligent search for slight cases and supervision of "contacts" should in most instances render school closure needless.

Diphtheria.

A. ADVANTAGE OF BACTERIOLOGICAL EXAMINATION.

42. The examination of the throats of "contacts," whenever practicable, by bacteriological means, is a most important aid to precautionary measures against the spread of diphtheria. If a positive result is obtained in the case of children showing no evidence of diphtheria, the presence of some measure of infection must be assumed, though it will not be advisable to insist on the removal of such patients to an isolation hospital.

It is recognised that in many sanitary districts arrangements do not exist for such examinations; but it has been thought better to set forth the line of action commonly adopted in the best organised sanitary districts. Clinical examination of contacts and other children often throws valuable light on the origin of outbreaks of diphtheria. Particular attention should be paid to children who have been absent without known cause, or who show evidence of pallor, enlarged glands, or sore noses.

B. RULES FOR EXCLUSION OF INDIVIDUALS.

(1.) *As regards each child attacked by the disease.*

43. (a.) *When treated in the Isolation Hospital* the patient should, when practicable, be detained until three successive swabs taken on different days have given consistent negative results. These swabs should not be taken until at least 48 hours have elapsed since the last application of any disinfectant to the throat.

In view of the debility left by an attack of diphtheria, and the possible return of infectivity in the secretions of the nose or throat a notice should be sent to the teacher stating that the child should not return to school for four weeks after return home.*

* Sometimes this period may be reduced to two weeks.

(b.) *When the patient has been treated at home* three successive negative swabs should, when practicable, be obtained as above; and after disinfection of the patient and his rooms and belongings, the same period of subsequent abstention from school attendance as above should be enjoined.

(2.) *As regards children living in infected houses.*

44. (a.) *When the patient has been removed to the Isolation Hospital* the teacher and the parent should be instructed to keep all children living in the same house away from school during the next two complete weeks, or even longer, unless these children have been cleared by negative result of bacteriological examination.

This interval is desirable owing to the frequent occurrence of slight cases of diphtheria and "carrier" cases.

(b.) *When the patient is treated at home* no other child from the same house should attend school while the patient is infectious, nor for four weeks afterwards.*

C. RULES FOR SCHOOL CLOSURE.

45. Although diphtheria, like scarlet fever, and unlike measles, usually spreads comparatively slowly in schools, it is apt to be very persistent, and not infrequently causes serious mortality especially among children under five years old. For these reasons, when cases of this disease occur in an infant school, there should be no hesitation in excluding children from attendance who are below the age of compulsory school attendance. This latter remark applies also for measles and whooping-cough.

Closure of other classes of the school should be resorted to only after clinical examination and, where practicable, bacteriological investigation for the detection of diphtheria bacilli in the pharyngeal or nasal mucus of children who have had slight sore throats, and of all other children who have been in contact with diphtheria patients has been made.

The need for protracted exclusion from school of recent diphtheria patients has already been emphasised. The systematic use of these measures should obviate the need for school closure for diphtheria.

Other Notifiable Diseases.

46. Children coming from houses in which have occurred cases of erysipelas or of enteric (typhoid) fever who are not themselves ill, need not as a rule be excluded from school. Nor is school closure required for either of these diseases, except in the rare instances in which enteric fever is due to some condition directly connected with the school.

Measles.

A. CHARACTERISTICS OF THE DISEASE.

47. Certain facts need to be borne in mind in adopting preventive measures against measles. In towns the attack-rate is highest in

* Sometimes this period may be reduced to two weeks.

the third, fourth, and fifth years of life, while the death-rate caused by the disease is highest in the second year of life. After the age of five the death-rate caused by it is relatively very small. These facts clearly indicate the importance of postponing an attack of measles, and of adopting special measures to ensure increased safety for children under five.

Persons seldom contract measles a second time, and as in populous districts epidemics commonly recur every two or three years, most of the older children are protected against it by having passed through a previous attack. This rule may not apply to a country village, in which epidemics may be absent for a long series of years.

The early infectiousness of measles while the symptoms are only those of a common "cold" is another marked feature of this disease. It is not unlikely that a majority of the total cases are infected by patients in this early stage. The incubation period from infection to the commencement of catarrhal symptoms is 12 to 14 days with fair constancy.

Although measles is very infectious its infection does not appear to be long-lived, nor to be commonly conveyed by healthy persons. It thus differs from small-pox, scarlet fever, and diphtheria.

But though there is reasonable ground for the opinion that measles is not readily, if at all, conveyed to school by healthy children coming from infected households, it is desirable, particularly in view of the greater fatality of attacks of measles in children under seven years of age, to assume the possibility of such spread by intermediaries in regard to scholars attending the infant school, and to act accordingly as stated below.

B. RULES FOR THE EXCLUSION OF INDIVIDUALS.

(1) *As regards children suffering from the disease.*

48. Children attacked by measles should be kept from school for four weeks.

(2) *As regards other children living in infected houses.*

49. In large towns, and in the smaller districts in which the majority of children over seven years of age who are attending public elementary schools have had measles, the practice is frequently adopted, when measles breaks out in a household, of excluding from school attendance only those children of the same household who attend the infant school, and those older children of the same household who have not had measles. These particular children of the same household should be excluded from school until 21 days from the date of onset of the illness of the last patient with measles in the house.

50. The above procedure can be recommended as the result of experience in large districts. It is a compromise which is obviously not a counsel of perfection, and may need future modification. Even under present conditions the procedure may need to be modified in accordance with the special circumstances of a particular district, with special reference to its past history as

to measles. The schedules for the medical inspection of school children, if kept carefully, will, in course of time, place at the disposal of the Medical Officer of Health and of the School Medical Officer the history of each child as to measles, as well as to other infectious diseases, and they will thus be able to decide, when a case of measles occurs in a particular class, which scholars in that class should, and which should not, be excluded from attendance at school.

C. RULES FOR SCHOOL CLOSURE.

51. School closure has probably more frequently taken place on account of epidemics of measles than for any other disease, but as the closure has been commonly deferred until a large proportion of the children are already absent, it has proved useless, in populous districts at least, for the purpose of preventing the spread of the disease.

If measles is introduced into a school, the first crop of secondary cases will occur about 12 days after the original case, and in 12 days more there will be a second crop comprising the majority of the unprotected children. Thus school closure, as ordinarily practised after the second crop of cases has occurred, fails to prevent an epidemic. In view of this experience a class closure of short duration after the occurrence of the first case of measles in the class may be substituted, the class being closed on the ninth day after the sickening of the first child, for a period of five days only. After this period, only those who have sickened need be excluded, along with those in the same households who have not had measles or who attend the infant school.

D. WARNINGS TO PARENTS.

52. Warning notices to parents have been found to be valuable in preventing the spread of measles through the attendance at school of infecting children. These warnings should be sent out as soon as measles has appeared in a class the parents being warned to watch their children and to keep them from school if the slightest symptoms of a "cold" develop during the following three weeks.

The warning notice should also suggest that the parent should at once inform the teacher if these symptoms develop. The teacher can then report the case to the Medical Officer of Health and the School Medical Officer.

Whooping Cough.

53. The rules as to exclusion from or closure of school for this disease should be similar to those for measles, except that the infection of whooping cough probably lasts six weeks, and the children in the house who attend the infant school should therefore be excluded from school for this period—or as long as the cough continues.

Mumps and Chicken Pox.

54. Three weeks' isolation should be allowed for cases of mumps and the same period, or until all scabs have disappeared, for cases of chicken pox. Inquiry should be made as to the vaccination of supposed cases of chicken pox.

In chicken pox it is well to exclude from attendance at the infant school all children of the same family as the patient. In mumps the same practice, owing to the long incubation period of this disease, involves much greater interference with school work; and in view of this fact and of the absence of danger to life, the exclusion may be confined to the patient himself.

Pulmonary Tuberculosis.

55. Pulmonary tuberculosis in a recognisable form is seldom a large factor in school life. Where it is known to exist, either through the medical inspection of children or apart from this, the affected scholar should be excluded from school in his own interest, and in that of the school, if the patient has cough with or without expectoration.

GENERAL NOTES AS TO PROCEDURE.

56. In any case in which the Sanitary Authority require the closure of a public elementary school the notice should be addressed in writing to the Correspondent of the managers, and should state the grounds on which the closure is deemed necessary. It should be signed either by an authorised Officer of the Sanitary Authority in pursuance of their resolution, or by two members of the Sanitary Authority. A copy of the notice should be sent to the School Medical Officer.

All such notices must specify a definite time during which the school is to remain closed; this should be as short a period as can be regarded as sufficing on public health grounds, since a second notice may be given before the expiration of the first, if it should be found necessary to postpone the re-opening of a school.

57. Reports of Medical Officers of Health to Sanitary Authorities, advising the closure of a school or schools in any district, are to be treated as "special" reports within the meaning of the General Order of the Local Government Board of March 23rd, 1891, and copies of them are required by Article 18 (15) and (16) of that Order to be sent to that Board, and to the County Council. These reports should state the grounds upon which the Medical Officer of Health advocates the closure of the school or schools in preference to the exclusion of particular scholars.

58. Any directions or authorisations given by the School Medical Officer with respect to the question of excluding individual scholars on the ground that their exclusion is desirable to prevent the spread of disease must be embodied in a certificate signed by him; and a copy of every certificate must be furnished to the Local Education Authority (Article 53 (b) of the Code of 1908). The certificate must be produced if required to any Inspector or Officer of the Board of Education's Medical Department.

ARTHUR NEWSHOLME.

GEORGE NEWMAN.

Meteorological Report.

To the Mayor, Aldermen, and Councillors of the
Borough of Lowestoft.

GENTLEMEN,

I have the honour to present to you the Annual Meteorological Report for the year 1909.

The following are points of interest :—

The year's sunshine record was 25 hours in excess of the average of the past ten years.

The rainfall was 0·67 inch below the average. A perusal of the comparative table will also show that the amount recorded was considerably less than at any other of the health resorts mentioned.

The mean temperature of the year was within one-fifth degree of the average.

There was again a fair sprinkling of easterly winds.

Many interesting enquiries relative to Meteorological matters have been received verbally and through the post ; full particulars have in all cases been given.

COMPARATIVE STATISTICS FOR THE YEAR 1909.

Station.	Mean Temperature.		Mean Daily Range of Temperature	Total Rainfall.	Total duration of Bright Sunshine.
	The Year.	June to Sep. (inclusive.)			
	°	°	°	Inches.	Hours. |
Lowestoft ..	47·6	56·5	10·9	23·36	1762
Other Health Resorts.					
Scarborough ..	48·1	56·8	11·6	28·56	1336
Douglas	47·3	54·9	10·0	41·40	1749
Harrogate ..	45·4	54·4	12·8	31·97	1399
Blackpool ..	46·9	55·3	11·6	35·46	1654
Llandudno ..	48·9	56·7	10·5	31·97	1609
Buxton	44·5	53·5	13·1	47·18	1517
Bettws-y-Coed ..	47·5	55·7	13·8	50·60	1287
Cromer	48·0	56·6	12·0	23·80	1518
Yarmouth ..	47·8	57·1	10·7	24·20	1779
Aberystwith ..	49·0	56·5	9·3	32·96	1443
Felixstowe ..	47·9	57·3	10·7	28·30	1838
Clacton	48·1	58·0	10·7	25·10	1741
Southend ..	48·7	58·2	12·4	25·80	1762
Margate	49·6	59·1	10·5	28·45	1669
Bath	48·4	57·6	14·9	30·16	1778
Ilfracombe ..	50·9	58·4	7·9	34·00	..
Folkestone ..	48·8	58·1	10·1	32·96	..
Brighton ..	49·2	58·6	10·8	30·98	1857
Worthing ..	48·9	58·4	11·5	32·11	1959
Eastbourne ..	49·2	58·4	10·9	35·20	1904
Bournemouth ..	49·3	58·6	13·8	33·58	1906
Ventnor	50·3	59·0	10·2	34·77	1899
Torquay	50·6	59·1	11·7	33·78	1935
Plymouth ..	50·4	58·9	12·2	35·20	1864
Scilly (St. Mary's)	52·0	58·7	7·4	27·00	1934
London	49·5	59·0	12·9	24·90	1373

THE BAROMETER, LOWESTOFT, 1909.

(Corrected for temperature and reduced to sea level).

Month.	Mean pressure of the air in the month.	Highest in month.	Date.	Lowest in month.	Date.	Mean pressure for latitude.	Difference from this mean in 1909.
	Inches.	Inches.		Inches.		Inches.	Inches.
Jan.	30·134	30·71	4	29·11	13	29·936	+0·198
Feb.	30·126	30·56	21	29·36	10	29·940	+0·186
Mar.	29·525	29·94	12	29·07	25	29·880	-0·355
April	29·985	30·55	4	29·50	13	29·950	+0·035
May	30·117	30·48	3	29·58	25	29·981	+0·136
June	29·956	30·35	18	29·38	22	29·979	-0·023
July	29·885	30·24	2	29·42	25	29·958	-0·073
Aug.	29·979	30·28	5	29·49	18	29·945	+0·034
Sept.	30·026	30·28	14	29·55	7	29·935	+0·091
Oct.	29·806	30·27	9	29·42	5	29·893	-0·087
Nov.	29·989	30·34	8	29·28	29	29·890	+0·099
Dec.	29·663	30·46	14	28·51	3	29·945	-0·282
Mean	29·932	Highest of all. 30·71	Jan.	Lowest of all. 28·51	Dec.	29·937	-0·005

The barometer is thus seen to have been above the local average on seven months of the year, the mean difference in the year being less than 1/100 of an inch.

RESULT OF OBSERVATIONS ON TEMPERATURE AND RAIN IN 1909.

1909	TEMPERATURE OF THE AIR IN SHADE.				RAINFALL.		
Month.	Highest.	Lowest.	Mean Temperature of Air.	Mean Humidity.	Monthly fall.	Days of 0·01 inch and above.	Average Monthly fall.
	°	°	°	%	Inches.		
January	50·0	24·0	38·3	88	0·74	11	1·45
February	53·7	29·1	37·2	84	0·86	11	1·35
March ..	54·2	22·5	38·1	87	2·48	22	1·44
April ..	70·2	32·0	47·4	80	1·36	12	1·47
May ..	71·9	32·6	49·7	79	1·16	8	1·56
June ..	71·0	39·1		83	2·61	15	1·81
July ..	75·9	46·8	59·2	79	2·06	17	2·78
August ..	86·2	43·9	59·5	84	1·22	9	2·36
September	67·7	40·4	54·5	86	2·01	14	2·27
October	65·4	32·4	52·6	87	3·67	19	3·17
November	55·5	28·8	42·9	84	0·88	14	2·36
December	53·1	24·1	39·4	92	4·31	23	1·95
Mean Temperature of the year				47·6	Total Rain } 23·36 inches	175 Days	Av'age total 24·03 inches
" " June to Sept. inclusive				56·5			

EARTH TEMPERATURE.

The highest and lowest readings of thermometers placed below the surface of the soil at depths stated below. These readings show extremes of the year, which for practical purposes are more important than the means.

Readings made at 9 a.m. daily.

Below Surface.	Highest in the year.	Date—1909.	Lowest in the year.	Date—1909.
	0		0	
One foot ..	66·2	16th Aug.	34·2	30th Jan., 2nd Feb. and 6th Mar.
Two feet ..	64·2	16th Aug.	35·7	7th Mar.
Four feet ..	60·8	19th Aug.	38·4	9th Mar.

The thermometer at 4 feet rose to 55 degrees on 23rd June, reached its maximum 60·8 degrees on 19th August ; was down to 50·0 degrees on 12th November, and 42·6 on 31st December.

SEA SURFACE TEMPERATURE AT PIER HEAD, LOWESTOFT, 1909.

Month.	Highest.	Mean.	Month.	Highest	Mean.
	0	0		0	0
January ..	39·0	37·1	July	61·5	59·3
February ..	39·0	36·7	August ..	64·5	62·9
March ..	42·0	37·1	September	60·0	57·2
April ..	50·0	45·5	October ..	57·0	54·9
May	56·5	51·2	November..	49·5	45·4
June ..	59·0	56·8	December	42·5	39·7

BRIGHT UNCLOUDED SUNSHINE, LOWESTOFT, 1909.

*Taken by a Campbell Stokes' Lens Burning
Sunshine Recorder.*

1909.	Total Duration.		Greatest Daily.			Sunless Days.
	Hrs.	Mins.	Hrs.	Mins.	Date.	
January ..	82	48	7	45	27	11
February ..	94	38	9	42	22	7
March	80	47	8	45	26	9
April	257	20	13	3	26	0
May	299	18	14	0	5th and 8th	1
June	148	55	12	42	8	5
July	206	18	14	5	24	2
August ..	213	50	13	54	6	0
September ..	129	0	10	36	2	4
October ..	98	32	10	6	6	9
November ..	96	18	8	0	13	6
December ..	53	52	6	30	20	12
TOTAL ..	1761	36	Greatest daily 14 5		Month July	66

In comparing these figures with those recorded at other Observatories, due regard should be paid to the form of Sunshine Recorder in use. Higher totals would be obtained by the Jordan Photographic Recorder.

REPORT ON THE DIRECTION OF THE WIND DURING 1909.

From Observations taken twice daily, i.e.—9 a.m. and 9 p.m.

1909	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Calm.	Winds of Greatest Force.
Jan.	6	4	5	3	1	11	18	11	3	N.E.
Feb.	8	3	13	7	5	2	6	11	1	W.N.W.—E.
March	4	3	12	5	9	10	6	8	5	S.E.
April	5	6	6	7	6	11	10	9	0	N.E.—S.E.
May	6	10	9	8	7	10	6	5	1	E.—W.S.W.
June	10	19	7	2	3	8	3	2	6	N.E.
July	11	3	0	2	2	7	21	14	2	N.—S.W.
Aug.	6	8	4	3	3	10	12	9	7	N.E.
Sept.	9	6	11	3	2	7	8	10	4	E.N.E.
Oct.	2	2	4	2	6	18	19	7	2	S.W.—E.
Nov.	7	6	8	3	0	4	12	17	3	N.—E.
Dec.	3	1	6	6	3	10	18	13	2	S.—W.
	77	71	85	51	47	108	139	116	36	

It will be seen from the above that the prevalent winds were from points between the S.W. and N.W.

NOTES ON THE WEATHER OF 1909.

JANUARY.—The year opened with anticyclonic conditions of a mild, foggy character. On the 8th there was a fresh gale from the North East, accompanied by squalls of snow and hail. This subsided on the following day, and throughout the remainder of the month comparatively fine, seasonable weather was enjoyed, with frequent night frosts. Rain and snow fell on eleven days, the total fall being less than $\frac{3}{4}$ -inch, a little more than half the average. Mean temperature of month, one degree above the average.

FEBRUARY.—With the exception of four days of cold wintry weather, from the 9th to 13th, and light falls of snow during the last three days, a really fine seasonable month was enjoyed. On the 22nd a splendid sunshine record of nearly ten hours was taken, and at night the temperature on the grass fell to twelve degrees below freezing point. From the 17th to the 23rd the sky was almost cloudless, accompanied by a keen bracing air, and light variable breezes. Rainfall for the month, half-an-inch below the average. Mean temperature of month, nearly $1\frac{1}{2}$ degrees below the average.

MARCH.—A marked change in the weather took place early in this month. There were frequent falls of snow and hail from the 12th to the 16th, with squally winds and fairly low temperatures. After the 17th the temperatures were much higher, and there were frequent falls of rain and some fog. There was, however, an occasional bright day. On the 27th eight and three-quarters hours of bright sunshine was recorded. Rainfall for the month, over an inch in excess of the average. Mean temperature of month, nearly two-and-a-half degrees below the average.

APRIL.—On the morning of the 1st an anticyclone caused the barometer to rapidly rise and the wind to veer to the North East and East, and from the 2nd to the 11th the sky was almost cloudless. Sunshine records of eleven hours and over were taken on eight consecutive days. The temperatures during this period, although not high, were fairly equable. On the 12th, at 5 p.m., a thunderstorm, not severe, broke over the town. After this date comparatively warm bright weather, with occasional falls of rain, was enjoyed. A fairly sharp thunderstorm was observed on the 27th. There was not one sunless day, the daily average being over eight-and-a-half hours. Rainfall for month, one-tenth inch below the average. Mean temperature of month, three degrees above the average.

MAY.—The 1st was cold, with intermittent sunshine, squalls of sleet, and slight frost at night. From this date to the 22nd there was a spell of fine bracing weather, with fresh breezes from the East and an abundance of brilliant sunshine, light rain fell on only four days. Over half-an-inch of rain fell on the 25th, followed by a Westerly gale. After the 27th, warm bright conditions prevailed. Mean temperature of month, about the average.

JUNE.—On the whole a cool, unsettled month. Rain fell on fifteen days. Thunder storms were observed on the 1st, 22nd, 25th and 28th, accompanied on each occasion by heavy rain. The total fall of rain was over three-quarters of an inch in excess of the average. Sunshine was considerably below the average, five days were sunless. Mean temperature of month, two-and-a-half degrees below the average.

JULY.—Comparatively warm, showery conditions prevailed until the 12th, with intermittent sunshine and variable breezes. From this date until the 25th a fairly fine warm period was enjoyed. Unsettled weather again set in, with half-an-inch of rain on the 27th. The prevalent wind was from the West. No thunderstorm was observed, but there was a slight electrical disturbance on the 6th. Mean temperature of month, about the average.

AUGUST.—The squally conditions abated after the 2nd, and a spell of warm fine weather lasted until the 15th. No rain fell during this period, sunshine was recorded every day, and on the 12th the maximum shade temperature of the year, 86·2 degrees, was registered. Thunder was heard plainly on the 16th and 17th, and some smart showers fell, but no storm broke over the town. Fairly warm, seasonable conditions, with occasional rain, continued throughout the remainder of the month. A thunderstorm occurred on the 25th, with three-tenths of an inch of rain. There was not one day without sun. Rainfall was 1·14 inches below the average. Mean temperature of month, about the average.

SEPTEMBER.—A fairly fine month. Some rain fell on fourteen days the total fall being a quarter of an inch below the average. There was a moderate gale from the E.N.E. on the 13th. No thunderstorm, no extremes of temperature, and no approach to frost. Sea breezes prevailed on twenty days. Mean temperature of month, two-and-a-quarter degrees below the average.

OCTOBER.—Typical Atlantic weather prevailed during the first half of this month, with fairly high temperatures and frequent rain. On the 7th a moderate gale blew from the South West, and on the 8th a thunderstorm broke over the town in the afternoon, with a quarter of an inch of rain. An occasional bright day, however, relieved the monotony, a splendid record of over ten hours of sunshine being taken on the 6th. After the 23rd there was a decided change to cold stormy conditions, with a continuous gale from the 26th to 29th. On the 26th the first frost of the season was recorded by the exposed thermometer on the grass. Nearly an inch of rain fell on the 28th, the total fall for the month being half an inch above the average. Mean temperature of month, 3·3 degrees above the average.

NOVEMBER.—A variable month, with a sprinkling of night frosts. Squalls of snow and hail fell on the 22nd, and light rain on fourteen days, the total fall was nearly one-and-a-half inches below the average. Moderate gales on the 13th, 17th and 21st. Light intermittent fogs on only two days. For sunshine see tables. Mean temperature of month, nearly one-and-a-half degrees below the average.

DECEMBER.—Cold wintry weather set in after the 3rd, with frequent heavy falls of rain and sleet. A fresh gale from the West blew on the 3rd. There was a slight improvement from the 11th to the 16th, after which showery conditions again set in, continuing until the 27th. The exposed thermometer on the grass fell to below freezing point on fifteen occasions, the lowest record being 20·1 degrees on the 19th. A bright, seasonable Christmas day was enjoyed, with three hours bright sunshine, light North West breeze, and a clear frosty night. The year also ended with a fine bright day, with temperature just above freezing point at night. Mean temperature of month, exactly the average.

The local averages are in all cases taken from MR. S. H. MILLER'S "Reductions of Meteorological Observations made at Lowestoft from 1879 to 1898."

CHARLES W. EDWARDS,

Borough Meteorologist.

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Memorandum by the Medical Officer of the Local Government Board on Adminis- trative Measures against Tuberculosis.

In this memorandum it is proposed to supplement from a medical standpoint the information contained in the circular letter issued by the Local Government Board, which was sent with the Public Health (Tuberculosis) 1908 Regulations to all Sanitary Authorities and Boards of Guardians.

The prevention of tuberculosis and the aid which can be given to patients suffering from it depend in large measure on knowledge of its pathology, and the earlier part of this memorandum deals briefly with this aspect of the question. Afterwards are set forth the chief administrative measures that can be taken against the disease, and the different forms of aid that can be given to the patient, either through administrative or voluntary agencies.

1. Scope of the Order and of this Memorandum.

The Order deals only with those patients who come under the care of poor-law medical officers, either at home or in poor-law institutions. Such patients are often only temporarily within the scope of poor-law administration, though at other times they may still need help and supervision. Furthermore, public health administration, whether dealing with poor persons, as defined in the Board's Order, or with other patients suffering from pulmonary tuberculosis, is concerned with similar problems; though these problems are more acute, and help is more urgently needed in cases of poor-relief than in other cases. In all cases alike, however, it will be wise to take measures to avoid the spread of infection, and with this object in view to educate and train the patient in the method of life suitable to his disease, to secure for him separate sleeping accommodation so far as circumstances permit, either at home or in an institution, to disinfect rooms which have become infected, and to remove all conditions which favour infection or re-infection.

In a few towns, all cases of pulmonary tuberculosis are compulsorily notifiable under local Acts of Parliament. In a considerable number of urban and rural districts, voluntary notification of cases of pulmonary tuberculosis is invited by the sanitary authority and secured in some proportion of the total cases of this disease. The Board have always advised that the

payment of reasonable fees for the voluntary notification of cases of pulmonary tuberculosis to the medical officer of health is within the powers of a sanitary authority.

As poor persons frequently pass outside the scope of the poor-law, and as in many sanitary districts the Regulations as to Tuberculosis will be worked alongside of a system of voluntary notification of patients affected with pulmonary tuberculosis, but not in receipt of relief, it is convenient and desirable not to limit the scope of this memorandum strictly to poor patients

2. *Characteristics of Tuberculosis.*

Tuberculosis is an infectious disease caused by the tubercle bacillus. Its development is aided by defective nutrition and by other conditions unfavourably influencing personal health, and by insanitary circumstances of environment; but the indispensable element in its causation is the tubercle bacillus, and the disease can be prevented by avoiding infection. The knowledge that tuberculosis is caused by the tubercle bacillus gives importance to the bacteriological diagnosis of tuberculosis mentioned in paragraph 4. In this memorandum infection from human patients alone is considered, as this is chiefly responsible for the causation of pulmonary tuberculosis.*

Tuberculosis is not only a preventable disease, but it can also be arrested, especially in its earlier stages; and indeed the vast majority of those attacked by it recover.

The total prevalence of tuberculosis as indicated by mortality has already greatly declined. This decline has occurred under the influence of improved sanitation and higher social welfare. These improved conditions have acted by diminishing infection and by increasing the resistance of the population to infection. Thus the vastly increased treatment of advanced cases of pulmonary tuberculosis in infirmaries and other institutions has been most valuable in securing segregation of patients from their families as well as in securing humane treatment for the patients themselves. Diminution of overcrowding has diminished infection and increased the resistance to it; and other measures of sanitation and social improvement have acted either by increasing resistance to, or by diminishing the amount of, infection in the community, or usually by the combined influence of both these factors.

Degree of Infectiousness of Pulmonary Tuberculosis.—As an infectious disease, pulmonary tuberculosis differs in several important respects from most of the acute infectious diseases. Its infection is derived under ordinary circumstances from one channel only, that of the lungs, the infectious material being

* Infection by bovine tuberculosis occurs chiefly by means of infected cows' milk, and can be avoided domestically by boiling milk. In France and Germany cows' milk is almost universally boiled.

discharged as expectoration or as cough-spray. This mode of infection can be controlled by the patient with but little trouble, if he is intelligent and scrupulously careful; whereas in the acute infectious diseases constant isolation of the patient is usually needed to protect susceptible persons. Against the limited channels of transmission of pulmonary tuberculosis must be set its protracted duration. It may be infectious during months or even years, instead of only for a few weeks. This statement needs to be remembered in conjunction with the following facts: 1st, a tuberculous patient discharges tubercle bacilli in his expectoration only at intervals; and 2nd, the evidence clearly points to the conclusion that in most instances short exposure to infection does not suffice to infect healthy persons to an extent that will produce serious disease.

These facts not only indicate that an exaggerated fear of infection in pulmonary tuberculosis is unnecessary; but they also emphasise the desirability of inculcating more exact knowledge as to the disease; and it is convenient to discuss at this stage the steps that can be taken to this end, although this discussion necessarily to a certain extent stretches into the province of administrative measures considered in later paragraphs.

3. *Educational Measures against Tuberculosis.*

Tuberculosis has often been described as a *disease of misery*. This is true, in the main, because misery favours infection; to a less degree because it renders the patient a ready victim to infection. But tuberculosis is much more a *disease of ignorance*, and many of the measures for its treatment and relief—whether by home visits, dispensaries, or sanatoriums—if properly employed, have among their most valuable results the hygienic training of the patient.

Educational measures will naturally comprise means for instructing the members of the general community, those more directly exposed to the infection of tuberculosis, and those already tuberculous. It is unnecessary here to enlarge upon the importance of teaching hygiene in school life as an aid in the fight against tuberculosis. An active and valuable propagandism outside school life is rapidly diminishing the number of those *who do not know* and increasing the number of those *who know* the essentials of the prevention of tuberculosis, and is increasingly bringing the pressure of public opinion to bear against indiscriminate expectoration, and against overcrowding and other evils of housing and occupation. Much more could be done in these directions by special instruction of various social groups, trades unions, friendly societies, and so on, as well as in the army and navy.

It is more urgently necessary that special instruction should be given to those more directly exposed to tuberculous infection;

and the value of notification is especially evident in this direction. Precise knowledge of the conditions under which tuberculosis is transmissible, of the channels of infection, and of means for appropriate disposal of expectoration, &c., are most desirable, if the relatives and attendants upon consumptive patients are to remain free from danger and free from an exaggerated fear of infection. More complete knowledge is the best means of preventing misapprehension. This knowledge should be possessed not only by nurses and relatives attending patients, but so far as practicable by those engaged in occupations in which tuberculosis is most rife, *e.g.*, among potmen, potters, cutlers, tin, lead or copper miners, bookbinders, printers, hairdressers, &c. Although cards of instruction are valuable, personal explanation by health visitors or others, when intelligently carried out, is much more efficacious; and opportunity may advantageously be taken as it arises to give collective instruction to nurses, to mothers, or to the members of friendly society and other clubs, in the groups particularly affected by tuberculosis.

Instruction of the tuberculous patient is essential for the prevention of tuberculosis. Pulmonary tuberculosis being a disease of protracted duration, the institutional or domestic isolation of patients during the whole course of the disease is impracticable. No responsible administrator would contemplate such a possibility. The ideal to be aimed at is that, wherever the patient lives and works, his powers of infectivity shall be inoperative. This ideal is not likely to be realised unless specific instructions are given in such a way that they will become effective in the patient's life. Of the means to this end, temporary abode in a Sanatorium is probably the most effective (*see* paragraph 11). The habits of life thus initiated can be maintained by continued watchfulness and care under a private practitioner or in connection with a tuberculosis dispensary, and by the home-visiting of a competent and sympathetic health visitor or nurse (paragraphs 7, 8, and 9). They are most likely to be maintained if the desire for recovery and the conscientious determination to avoid infecting others are both brought to bear as motives influencing the patient's manner of life.

4. *Early Diagnosis.*

Stress has been laid upon teaching the nurses and relatives of the consumptive patient. Except in so far as it is given as part of instruction to the general community, instruction of those about a patient can only begin when the nature of his disease has been recognised. For this among other reasons every facility for securing early diagnosis is an important means of preventing tuberculosis.

Among the most valuable of these is —

Bacteriological diagnosis by detection of tubercle bacilli in the sputum. Although pulmonary tuberculosis can be diagnosed before there is any expectoration if the patient on consulting

a medical practitioner is examined with great care, yet in actual experience the provision of facilities for the gratuitous bacteriological examination of sputum is one of the most successful means of securing an earlier recognition of cases of this disease than would otherwise occur.

The medical inspection of school children will, it is hoped, secure the detection of previously unrecognised cases among school children.

Under present conditions a large proportion of the total cases of pulmonary tuberculosis remain unrecognised until either consolidation or cavitation of lungs has occurred and patients are approaching or have reached the period of complete disablement for work. In such cases there must already have been many opportunities for spreading infection. Happily, there is strong reason to think that usually only those who have been exposed to protracted infection become infected to an extent that produces serious disease; but it is, nevertheless, very important that the precautionary measures should be begun at an early period of disease, especially as this enables the patient himself to receive effective because early treatment.

The visits following notification of cases of pulmonary tuberculosis may not infrequently be made the means of securing early diagnosis of previously unrecognised cases in the same household. At this point, among others, voluntary and official agencies can join forces for the giving of hospital and dispensary letters to failing members of the affected household.

The conditions under which dispensary and hospital aid can be obtained are mentioned later (pars. 10, 11 and 12). They need to be considered at this point in relation to the facilities for early diagnosis. More effective preventive measures could be taken, were every encouragement given for the systematic treatment of "persistent colds," repeated attacks of "bronchitis" and the like, which may indicate an early stage of pulmonary tuberculosis. The difficulties that the poor frequently experience in obtaining hospital out-patient letters and the delay involved in receiving skilled attendance at such institutions render it desirable for large communities to consider the need for a special tuberculosis dispensary at which every encouragement is given for the early diagnosis of disease. The organisation of such dispensaries is considered in par. 10.

5. *The Medical Practitioner's position in relation to Preventive Measures.*

When a diagnosis has been secured, the first and most essential point is for the doctor in attendance, whether he be the poor law medical officer or a private practitioner, to acquaint the patient with the nature of his illness. This is indispensable, if the active co-operation of the patient in regard to precautions is to be secured. It is equally necessary for the patient's own

welfare, which depends in large measure on his intelligent carrying out of instructions. As the vast majority of cases of pulmonary tuberculosis recover when recognised early, and as life in more advanced cases can be prolonged by efficient treatment, there need be no hesitation in following this course.

The doctor will also consider whether, even though the particular case is not compulsorily notifiable, he will not be acting in the interest of his patient, as well as of the public health, to notify his case to the medical officer of health, under a voluntary system of notification.

Next must follow the giving of instructions to each patient and the disinfection of bedrooms, &c., when the need for this is indicated. Although the medical attendant may be able to give the personal instructions, it is none the less true that, under the usual conditions of medical practice, and particularly among the poor, supplementary aid is required to prevent infection and to secure the best arrangements for the patient's welfare.

It should be the aim of the medical officer of health to furnish this supplementary aid in a way that will secure the continued co-operation with him of the patient and of his medical attendant.

6. *The Administrative Control of Tuberculosis.*

Incidentally some of the measures for the administrative control of tuberculosis have already been mentioned. The educational measures enumerated in par. 3 go far towards preventing the disease ; and indeed every administrative measure is successful just so far as it secures enlightened precautions on the part of the consumptive patient.

Measures to secure early diagnosis, whether by bacteriological or other means, stand equally high as means of preventing the disease ; for direct precautionary means—apart from scrupulous care respecting expectoration on the part of the entire population—can only be taken when a diagnosis has been made.

By providing information to the medical officer of health as to the presence of cases of pulmonary tuberculosis among the poor the Regulations as to Tuberculosis recently issued by the Board enable sanitary defects to be promptly remedied and those administrative measures of control introduced that are set out in this Memorandum.

Of other measures against tuberculosis, the most important are the investigation of cases of the disease, advice being given, disinfection and cleansing recommended, and spit-bottles supplied to the poor ; the provision of dispensary or poor-law treatment of patients ; the provision of sanatoria and of hospitals for advanced cases of disease.

These measures are, to a very large extent, also measures for aiding consumptive patients. The two objects cannot, in fact, be completely separated. The measures taken for preventing

infection equally prevent the patient from receiving further doses of infective material, and he especially will gain by their success. That no strict line of demarcation can be drawn between personal and communal interests is further indicated by the fact that the community, by diminution of infection and by avoidance of loss of working ability, gains greatly when patients are cured, or when, apart from their cure, they are so housed that they cease to disseminate infection. Hence measures for the treatment of the individual patient cannot be left out of consideration in providing against the spread of the disease, any more than they can in the case of enteric fever. In both diseases the cure and the care of the individual patient are the most effective means of avoiding further cases.

7. *Procedure in Official Investigations.*

When a notification of a case of pulmonary tuberculosis has been received by the medical officer of health, certain inquiries should follow. These inquiries should be made by the medical officer of health or by a trained assistant, and the advice given at these visits should, as already indicated, be so given as not to interfere with advice already given by the doctor in attendance on the patient. The objection that the patient or his relatives on rare occasions make to the visit, can be met by indicating early in the interview the points in connection with which the patient can be helped, inquiries as to the previous or family history of the patient being taken up later, possibly at a second interview. By the exercise of tact and discretion, there seldom need be difficulty in obtaining all the information required for public health purposes, or in giving all the counsel that the patient and his family need. Above all, the investigator must not pursue inquiries in a manner or give information that may prevent a consumptive patient from continuing to earn his livelihood. His duty in this respect as a rule ends when he has advised as to the precautions to be adopted. This attitude does not prevent him from investigating, *apart from notifications*, the conditions under which consumptive patients work, and such investigations are sometimes indicated.

Re-visits should be made by an officer from the medical officer of health's department such as an inspector, health-visitor, or a nurse set apart for this work, who will encourage the patient in carrying out the treatment necessary for maintaining his ability to work, and the precautions needed to prevent infection. The results of these visits should be reported to the medical officer of health or to the attending physician (paragraphs 9 and 10) according to circumstances.

The Board's Regulations as to Tuberculosis provide for the medical officer of health obtaining information that shall enable him to keep in touch with consumptive poor-law patients when they change their abode. The Regulations also enable the

medical officer of health to have infected premises cleansed and disinfected before they are occupied by new tenants. Incidentally also, the Regulations enable him to secure much more promptly than would ordinarily be practicable, remedial action in regard to insanitary conditions of dwellings, and particularly overcrowding under circumstances involving the specific danger of infection.

8. *Action against Infection.*

The chief means for the prevention of infection in tuberculosis is the prevention of indiscriminate expectoration. For this purpose sanitary authorities having the necessary powers may advantageously make bye-laws prohibiting spitting in public carriages, halls, waiting-rooms, or places of public entertainment; and the enforcement of such bye-laws, and the exhibition of notices warning against expectoration have a most beneficial influence.

The visit of the medical officer of health or of his assistant to the patient will be made the occasion for instruction as to covering the mouth when coughing, and as to the method of use of suitable handkerchiefs and of pocket spit-bottles. The sanitary authority can provide such spit-bottles or other suitable means of preventing the spread of infection. Frequently such precautions have not been adopted in the past course of the case, and disinfection and cleansing of bedrooms will therefore be indicated. Such disinfection should always be carried out when the patient changes his address.

Continued spread of infection can be obviated if the patient will carry out the simple precautions indicated above, concerning which detailed advice should be given in each case. The patient's habits as to spitting are, however, often difficult to change. Hence the importance of the short training of patients in a sanatorium to which allusion is also made in paragraphs 3 and 11. At a later stage of illness difficulty in preventing infection arises from another cause. The patient is feeble and possibly bed-ridden; his cough is violent and his expectoration frequent and excessive; and under such conditions, in the home circumstances commonly prevailing among the poor, the avoidance of repeated and massive infection is difficult. It is at this stage that institutional treatment becomes a very important means of preventing infection (*see* paragraph 12).

It will be noted that, subject to not inflicting upon the poor person coming within the scope of the Board's Regulations as to Tuberculosis "any restriction, prohibition, or disability affecting himself, or his employment," &c., the Sanitary Authority can under these Regulations take all necessary measures for the disinfection or cleansing of infected articles and premises, as in the case of any infectious disease; for the

safe disposal or destruction of infective material discharged by consumptive patients ; for the proper use of sleeping apartments ; and for furnishing any appliance, &c., that may help in preventing the spread of infection. These regulations will enable the Sanitary Authority and its officers to minimise the risks of infection from poor-law patients caused by unguarded spitting and by improper use of sick rooms. There will, it is hoped, be little difficulty in securing the observance of the same precautions in respect of other than poor-law cases of pulmonary tuberculosis.

If the patient should continue to be treated at home, visits will be made at intervals by an officer attached to the medical officer of health's department, or in larger towns attached to a tuberculosis dispensary ; and these visitors will encourage the patient to pursue the necessary regime, and to make regular visits to his doctor or to the centre for medical aid.

9. *Home Training and Supervision.*

If the patient is treated at home throughout the whole course of his illness, it is much more difficult to secure his continuous adoption of the necessary precautionary measures than if he has had a short course of treatment and training in a sanatorium (*see* paragraph 11). To ensure this end requires conscientious perseverance on the part of the patient, and tactful advice and encouragement from the visitor sent as a result of notification. If the patient is in the charge of a family practitioner, the latter should be able to give much assistance. If the patient cannot afford to have a private doctor, the need for systematic medical assistance of some other kind arises. The patient may remain under the care of the poor-law medical officer, and in such cases it will not be difficult for the visitor to co-operate with him in the interest of the patient and of those about him. As a rule, however, poor-law cases of pulmonary tuberculosis, being most often cases of advanced disease, are preferably treated in the infirmary (*see* paragraph 12).

If the patient is treated at home under the care of a private practitioner, the visitor's work will be limited by the considerations advanced in paragraphs 7 and 8.

If the patient, although poor, is not a poor-law patient, but attends at intervals as an out-patient at a hospital or a dispensary, the visits he receives will advantageously be somewhat more frequent than when the patient is under the care of a private practitioner, and may be made helpful not only in advising the patient as to measures of personal hygiene and precautions against infection, but also in bringing him into relationship with the agencies for aid that his circumstances indicate as needed. Of these, the most important when completely organised is—

10. *The Tuberculosis Dispensary.*

The object of this institution is to secure early diagnosis for patients suspected to be suffering from pulmonary tuberculosis, and to direct their treatment in the light of knowledge not only of their medical, but also of their domestic and industrial needs. The ideal of the dispensary implies, therefore, a careful system of domiciliary visitation and investigation.

Such visitation and investigation have already been recommended (pars. 7, 8 and 9), and it is evidently undesirable that visits to the same patient should be duplicated. When such a dispensary is already at work, arrangements can be made for nurses attached to the dispensary to visit the patients at home, and enter the information obtained by them on forms, which will subsequently be seen both by the dispensary physician and the medical officer of health. These nurses in some districts will be the health visitors of the sanitary authority, and in such cases the domiciliary work of the dispensary becomes a sub-department of the medical officer of health's work.

A well-organised tuberculosis dispensary becomes a valuable aid in securing more general notification of cases of tuberculosis; and its visitors can not only secure that domestic precautions are taken, but also that the patients are brought into touch with the different forms of domestic aid, or with the sanatorium or hospital treatment that the needs of the individual case indicate.

A tuberculosis dispensary is specially adapted for the needs of large towns. When local circumstances do not permit of its formation, similar work can be organised in connection with other dispensaries, and with the out-patient departments of hospitals, voluntary or official health visitors being employed, as circumstances permit. Whether a new organisation is started, or whether—as may sometimes be both economical and efficient—old organisations are modified and improved for the new work, the essential points are that the doctor when treating his patient shall have before him all the circumstances relating to the patient's manner of life likely to aid him in giving rational advice; that the patient shall receive help adapted to his social needs; and that there shall be no redundancy or lack of supervision and of the help requisite for the patient and for the protection of others against infection.

11. *Sanatorium Treatment.*

Home treatment if depended upon alone often fails to prevent infection, besides failing to cure the patient. Hence the importance of sanatorium treatment when practicable. Under section 131 of the Public Health Act, 1875, the sanitary authority has power to provide such treatment for patients whether patients are in the receipt of relief or not.

Considerations of finance will need to be borne in mind, and it is to be remembered that thoroughly efficient sanatoriums for consumptives need not be built upon expensive lines. Before embarking on any large scheme each sanitary authority should consider what it can do with arrangements already available. Some sanitary authorities have found that in the intervals of epidemics empty rooms or wards of their isolation hospitals can be utilised for the treatment of pulmonary tuberculosis, and have taken action accordingly.

In rural districts it will be practicable by the use of temporary huts or tents, erected either at the patient's home or in the grounds of the infirmary or of the isolation hospital, to treat consumptive patients with minimum expense; in other instances private houses may be adapted as hospitals for the purpose; while in some circumstances contribution towards the cost of erection and maintenance of a sanatorium jointly with others may be the best course.

With regard to the use under regulated conditions of the wards of an isolation hospital for the treatment of pulmonary tuberculosis, experience has demonstrated that this can be done with entire safety to the consumptive patient and with great success in his treatment.

The sanatorium treatment of the consumptive may be directed towards the cure of the patient, or towards such amelioration of the patient and incidental training in desirable habits as may be practicable in a shorter stay than is required for his cure.

In considering the cure of the patient by sanatorium treatment, what has already been said as to early diagnosis needs to be borne in mind. In actual experience a large proportion of poor patients cannot be cured at the stage at which their disease is first recognised, without treatment which is so protracted and so large in amount when attempted for a large number of patients, as to be outside the range of present practical administration. Many such patients, however, either recover, or without complete recovery continue to be able to work indefinitely, even when protracted sanatorium treatment cannot be secured. Their working life can be extended and their capacity to spread infection can be stopped by an occasional stay in a sanatorium, of limited duration, say, for a month. It is on sanatorium treatment of this type for patients still able to work that stress may be laid. The patient usually does not lose his place by the short absence from work contemplated; he is willing to come into a sanatorium for such a short stay, when he would not accept more protracted treatment; and the improvement experienced during such a short stay in a sanatorium is often most remarkable. This, however, is not the only gain. When the patient enters the sanatorium his dwelling is disinfected; his relatives are relieved temporarily from a source of anxiety; and the patient while in the sanatorium is trained

in the methods of disposal of sputum, and in the general hygienic regulation of his life in a practical manner that is scarcely possible at home. On his return home he is therefore no longer likely to be a source of infection, and the general hygiene of his home is almost certain to reflect the good influence of his stay in the sanatorium. From the standpoint of the sanitary authority a much larger number of patients can, in this way be treated and prevented from becoming a source of infection, than if permanent cure of the individual patient were made the only consideration.

12. *The Institutional Treatment of Advanced Cases of Pulmonary Tuberculosis.*

A certain proportion of the total number of consumptives gradually deteriorate in health, notwithstanding every effort made on their behalf. The patients to whom this remark applies will diminish in number when they and the general public realise the importance of early and accurate medical recognition of the causes of failure in health, especially if accompanied by cough. Under present conditions, however, it is likely that a large number of cases of pulmonary tuberculosis will continue to occur that will remain unrecognised in the early stage of disease. It does not follow, as is too often and too hastily inferred, that the total amount of tuberculous infection cannot be steadily and even rapidly diminished. The number of cases of tuberculosis at any one time, so far as the disease is derived from other human cases of the disease, must depend on the total number of similar cases from which the infection of tuberculosis can be derived, and on whether the dosage of infection suffices under the conditions of its recipients to produce disease. Evidently then the occurrence of future cases of tuberculosis, even though these measures are not adopted early in each case, can be prevented in the proportion of the extent to which measures are adopted (*a*) for preventing the patient from scattering infection by cough and expectoration, and (*b*) for keeping the patient separate from those susceptible to infection. The first aim is secured by sanatorium and dispensary training and treatment and by home visiting and advice, with the co-operation of the patient; the latter aim can be secured by providing the patient with a separate bedroom and suitable nursing at home, and, when this is impracticable, by providing efficient hospital accommodation.

In the homes of the poor, it often happens that suitable bedroom accommodation cannot be provided for advanced cases of pulmonary tuberculosis, and that the wife or other relative in charge of the patient is overworked and thus rendered more easily a victim to the same infection. Hence, the medical attendance and nursing of a large proportion of the total advanced cases in hospitals must form an essential part of any effective scheme for preventing tuberculosis. It is to a very

large extent a need already met; for though the provision of hospital beds for such cases has not, in the main, been made with any intention of diminishing the total mass of infection, it has operated in that way. Not only in general and special hospitals but on an immensely larger scale throughout the country, and especially in our towns and cities—in which domestic overcrowding is most marked, and in which the domestic nursing of cases of pulmonary tuberculosis is therefore most dangerous—consumptives have been treated in workhouse infirmaries, many of them under excellent conditions, and probably all of them under conditions less likely to cause spread of infection than the dwellings of the very poor and the destitute. Such arrangements need to be extended, and the hospital treatment of the bedridden consumptive in the ideal state will be made so popular that domestic infection will become much less frequent than at present.

In the preceding pages no attempt has been made to enumerate all the measures that can be utilised against tuberculosis. Nor has it been urged that when notification of cases has been secured and free bacteriological diagnosis provided, subsequent measures against the disease should be taken in any particular order. This will necessarily vary with local needs and local possibilities. The best work will be secured if there is active co-operation between voluntary and official workers and agencies; and this remark applies particularly in securing sanatorium treatment for patients. If all the measures within the range of practical action are adopted, there is no reason to doubt that by wise administrative effort following upon the Board's Regulations as to Tuberculosis, the decline in the number of centres of infection can be made more rapid, and thus can be secured a quicker decline in the death-rate from tuberculosis than has hitherto been experienced. Although, owing to the long duration and occasional long latency of this disease, results in regard to it cannot be measured with accuracy except after the lapse of a considerable number of years, it may confidently be expected that administrative measures will enable sanitary authorities gradually to bring tuberculosis under their control, and to secure that it shall become as much a disease of the past in this country as leprosy has become.

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